CHINA REPORT

中国新闻周刊
English Edition

Volume No. 84 May 2020

CULTURE

Infections Grooves: Folk singer cures quarantine blues

POLITICS

Binning the Bags: Ending the era of single-use plastics

ECONOMY

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Published by China News Service
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ISSN 2053-0463

China should adopt more expansive economic policies in response to Covid-19

China's manufacturing sector has bounced back after recovering from a miserable first two months as the economy was crippled by the Covid-19 outbreak. The official manufacturing purchasing managers' index (PMI) went above 50 to reach 52 in March, up from an all-time low of 35.7 in February. The export sector also somewhat recovered, but it is still 3.5 percent lower than that of 2019. China's exports in the first two months dropped by 15.9 percent year-on-year.

Despite these positive signs, the government should not be complacent. As the global pandemic is still ongoing and is yet to reach its peak, the government should prepare for the worst and take an aggressive approach to mitigate its impact. This means that the government should be more expansive in both its fiscal and monetary policies.

> Despite these positive signs, the government should not be complacent. As the global pandemic is still ongoing, and is yet to reach its peak, the government should prepare for the worst and take an aggressive approach to mitigate its impact.

To cope with the impact of the Covid-19 pandemic, governments around the world have launched aid packages to help local businesses survive the crisis. The US government released an unprecedented US$2.2 trillion package to rescue the economy. The Australian government launched a A$130 billion scheme (US$82b) to provide replacement wages for up to 6 million people who may lose their jobs due to the coronavirus.

China has refrained from resorting to a central aid package in response to its struggling economy. Instead, local governments have launched their own policies, including reducing taxes and fees and issuing vouchers to consumers to help businesses cope with the virus control measures. But as the global pandemic hammers global demand, putting great pressure on China's export sector, the central government should be ready to offer further help to businesses.

The central government should continue to increase the monetary supply to boost the cash flow in key economic sectors. Given the impact of the pandemic, the government should direct State banks to allow loan extensions. In the past months, disruption of the supply chain has led to an increase in commodity prices, driving up inflation, which in ordinary times should lead to a tighter monetary policy. Concerns over high debt may also discourage authorities from adopting a more liberal monetary policy. But as this is no ordinary time, tightening the monetary policy will have serious consequences.

In the meantime, authorities should adopt a more liberal fiscal policy. In the past years, the government has limited its deficit to within 3 percent of China's GDP. The decline in tax revenues may limit the government's capacity to spend more. If the pandemic is brought under control, the government can increase its spending on infrastructure to boost the economy.

All in all, the government should have a clear idea about its economic priorities, given the long-term threat posed by the coronavirus crisis, concerns over debt, and inflation. Even the much-focused-on annual growth GDP target should not be a top consideration. Economic policy is mostly about expectations. Even if China enters a recession in 2020, it would be as a result of external impacts, rather than due to internal problems with the economy. The government should not worry about it too much. As long as China can achieve an economic soft landing under the pandemic, the long-term prospects of the Chinese economy will remain intact. ★

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PHOTO BY CFP

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MEDIAFOCUS

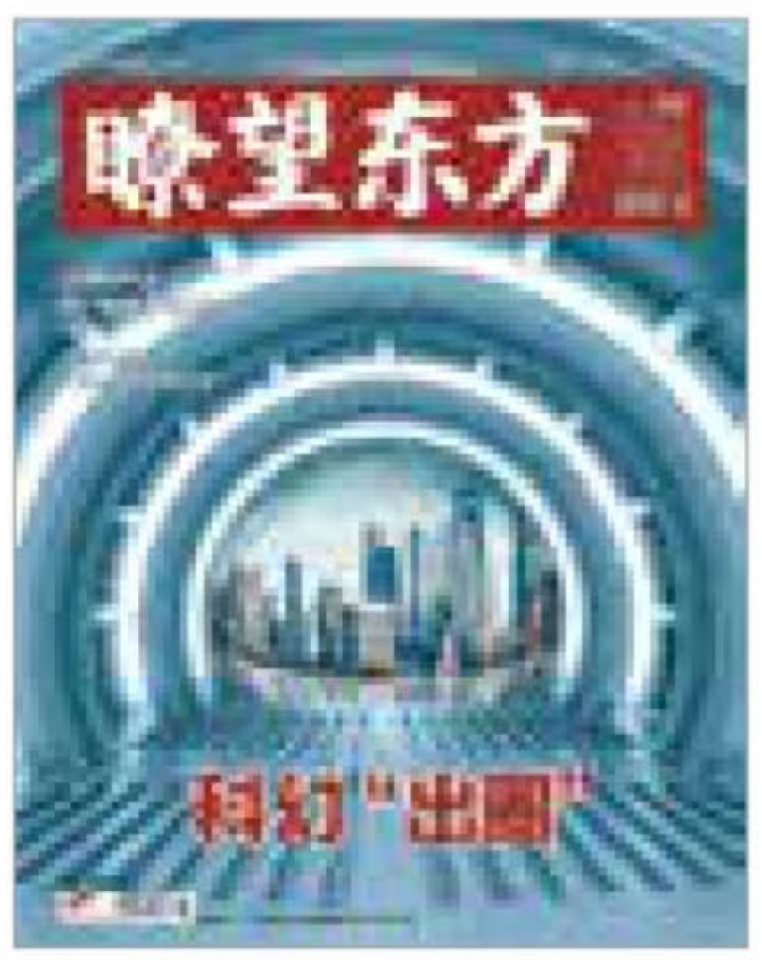
ChinaReport, Chinese Edition
April 6, 2020

New Start for Wuhan

On April 8, China ended the lockdown of Wuhan, the original centre of the coronavirus. It means the epidemic is virtually over in the city and things are slowly normalizing. Wuhan and its people are recovering from the closures of the past months and people are returning to work. During the fight against the epidemic, the city and its medical system have survived unprecedented hardships with the help of the whole country and at the great sacrifice of medical workers. The public health system in the city has plenty of room for improvement and it will serve as a good example for the country to prevent and control potential fatal contagious diseases. It is of great significance to learn from past lessons, take preventive measures and address the weak links in the country's public health system.

Oriental Outlook
April 1, 2020

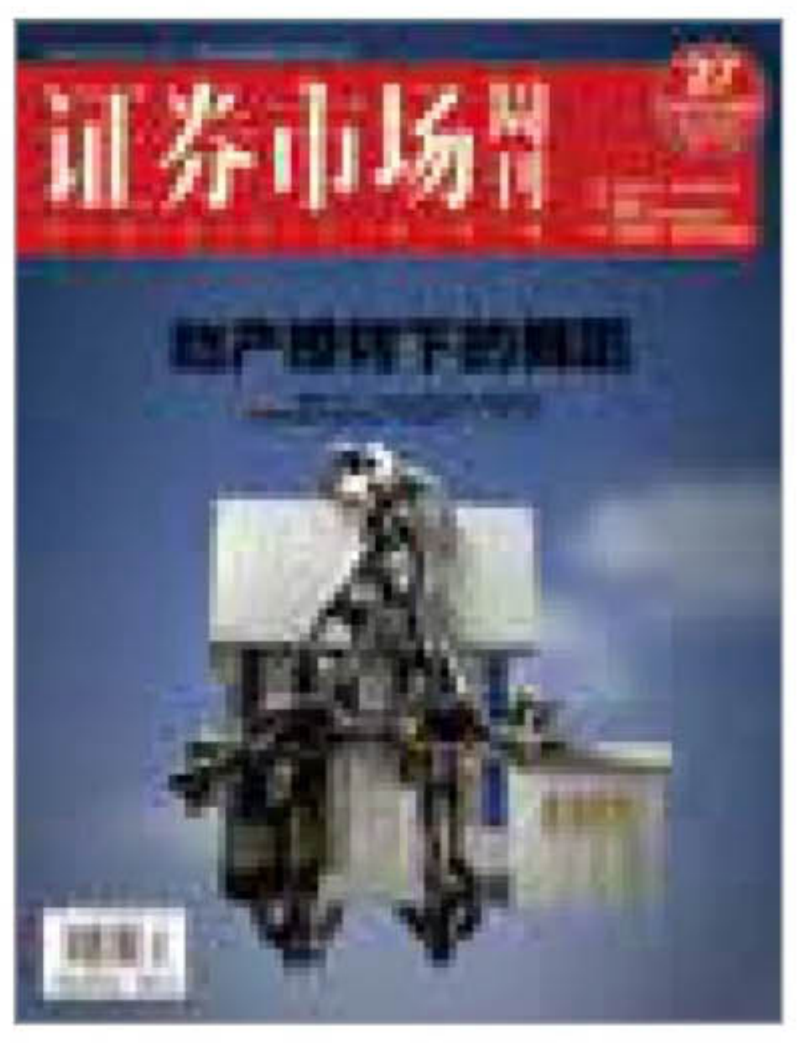
Sci-fi Boom



Since writer Liu Cixin won the Hugo Award for best science fiction writing in 2015 for the *Three-Body Problem*, and with the great success of the film *The Wandering Earth* in 2019, based on another of his works, sci-fi has become more popular in China. Autonomous driving technology, maglev trains and city security improvements using big data and artificial intelligence have made sci-fi an important factor to drive the creative economy at a time when about 500 cities nationwide aim to become smart cities. According to the 2019 Chinese City Science Fiction Index Report which was released by the Science and Fantasy Growth Foundation, Chengdu, Beijing, Shenzhen, Shanghai and Nanjing top the list of cities where the sci-fi sector is booming. It also showed that the gross output of the whole sci-fi industry in China for 2018 hit 45.6 billion yuan (US$6.4b). Sci-fi has sparked new ideas and inspired emergency response plans for policymakers, becoming a crucial factor to enhance competitiveness and the innovation capabilities of cities.

Securities Market Weekly
April 12, 2020

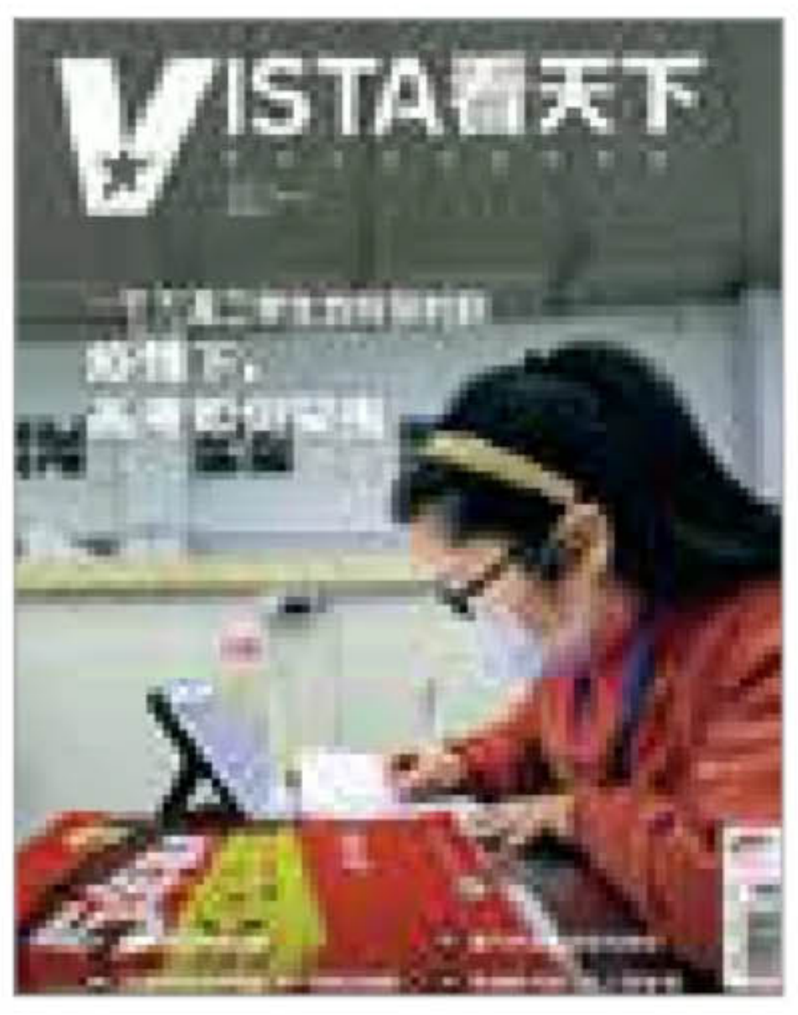
Real Estate Market Hits Low



According to the National Bureau of Statistics (NBS), investment in real estate in China dropped by 16.3 percent year-on-year in the first two months of 2020, which the NBS said was a historic low, without giving a timeframe. Meanwhile, sales of commercial properties measured by floor space dropped to 847.5 million yuan (US$124.6m), down 39.9 percent year-on-year. To offset the coronavirus impact, a growing number of cities have loosened restrictions on housing purchases to keep the market stable and bolster economic growth. Data shows that real estate accounted for 7 percent of China's GDP growth and revenue from land sales for 52.9 percent of local governments' fiscal revenue in 2019. Real estate polices in accordance with conditions in different cities will be the main factor to gauge real estate market trends. Policymakers have to weigh housing prices, the economy and livelihoods at a time when the Covid-19 epidemic is expected to continue for a while.

Vista
March 2, 2020

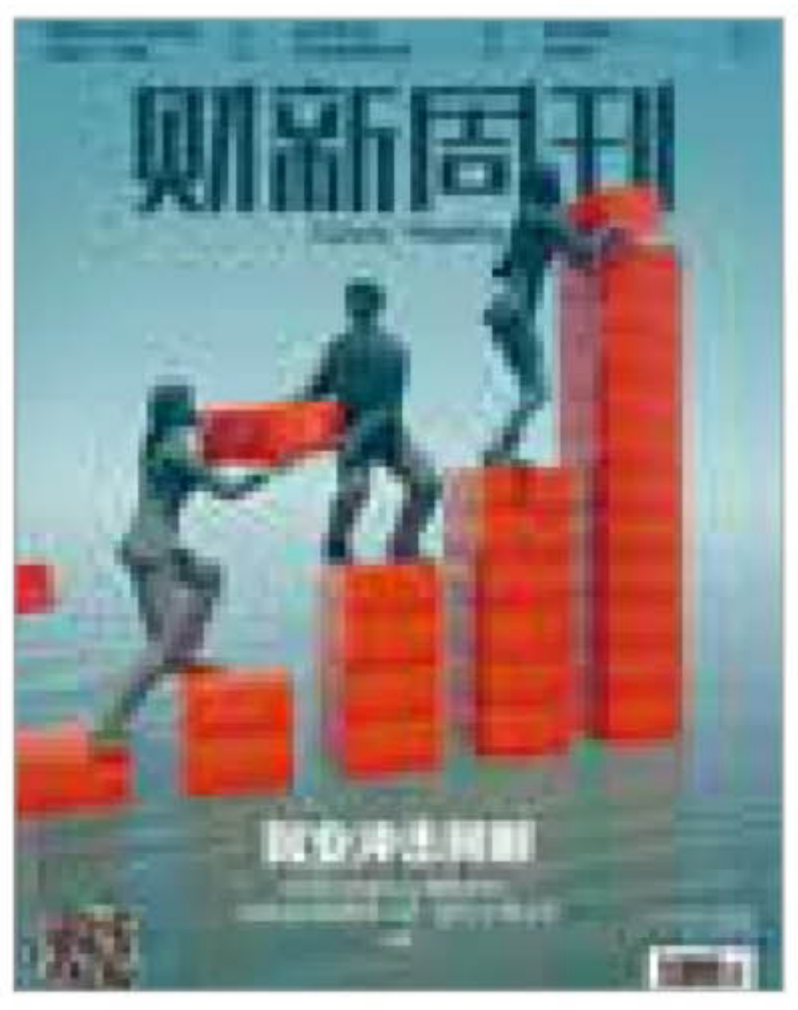
Exam Digital Divide



A total of 10.71 million students have registered for China's national college entrance exam, known as the *gaokao*, in 2020. Because of the coronavirus, the two-day exam has been pushed back a month to early July, the first time it has been postponed since it resumed in 1977 after being cancelled during the Cultural Revolution (1966-76). The Ministry of Education said the decision was made to ensure student health and stop the spread of the disease. By late April, at least 24 provinces and municipalities nationwide will have restarted classes for final-year high school students. By that time, the majority of students will have been taught online for two or three months. Against the backdrop of the digital divide between urban and rural students, it will be a challenge for the country's rural examinees to compete with their urban peers who are more tech-savvy and have more access to computers and the internet.

Caixin Weekly
March 30, 2020

Unemployment Concerns



China's urban unemployment rate increased to a high of 6.2 percent in February as roughly 45 million people lost their jobs, mainly because of the coronavirus, in the first two months of 2020. The unemployment rate is expected to fall in the second half of the year as a growing number of enterprises, particularly smaller ones, will resume operations. Employment is a priority for the central government to keep the economy and society stable. Experts cautioned that resumption of work does not mean that operations are at the same capacity as before, as the criteria for work resumption remain stringent. It will be a challenge for the country's social security and for the vast population working in service sectors such as restaurants, transportation and tourism.

WHAT THEY SAY

“Even the air was thick with anxiety and fear.”

Ding Lijun, a psychologist from Xiamen, Fujian Province that was sent to Hubei Province to assist with the Covid-19 pandemic, calling for more attention to the mental health of critical patients, in a recent interview with news portal *The Paper*

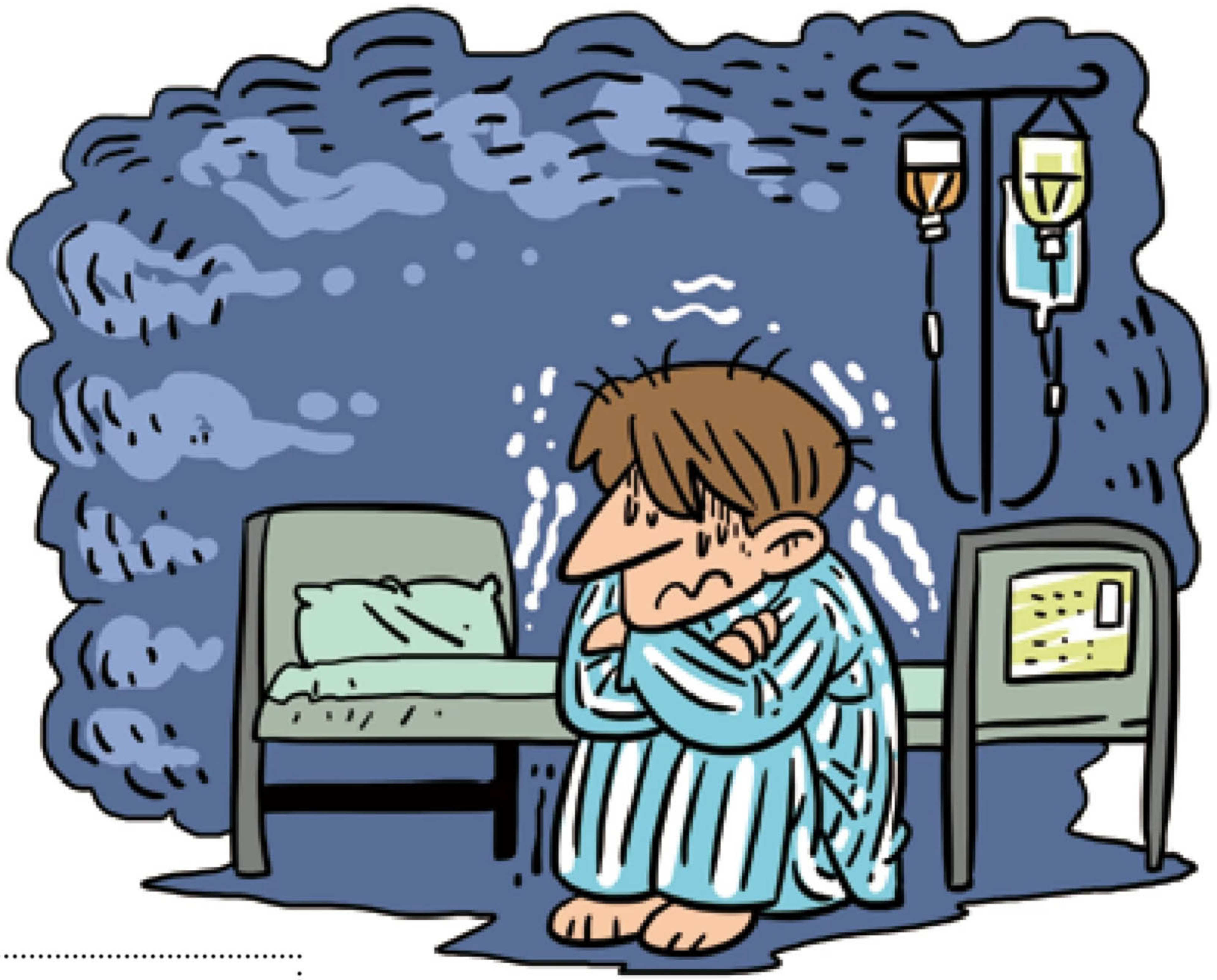


ILLUSTRATION BY XIAO ZHENDUO

“How well the pandemic will be controlled is not determined by the country that does it best or earliest, but by the one that does it worst.”

Zhang Wenhong, noted infectious disease expert, calling for international cooperation against the Covid-19 pandemic during a recent interview with China Global Television Network (CGTN)

“Chinese departments covered up some [SARS] cases 17 years ago, but for the current [Covid-19] epidemic, the central government has been totally transparent.”

Zhong Nanshan, infectious disease and Covid-19 expert, during a recent interview with Shenzhen Television

“At a time when solidarity is essential, we need to keep cool heads and clearly say ‘no’ to the folly of fanning racism and xenophobia, and to scapegoating other countries or races.”

Cui Tiankai, Chinese ambassador to the US, calling for Sino-US cooperation against the Covid-19 pandemic in *The New York Times*

“‘Wearing a yellow dress with puffy hair’ makes me think of corn!”

Sheng Jun, president of Yunnan Agricultural University, on how the viral song from popular talent reality show *YouthWithYou 2* helped him relate to younger students and encourage them to help farmers increase their revenues through technologies such as livestreaming

“The fundamental antagonism between countries urgently needs to be replaced with cooperation to deal with pandemic diseases that threaten the safety of humans and nature.”

Li Haidong, a professor at China Foreign Affairs University, in response to Western politicians blaming China for the Covid-19 pandemic, on news commentary WeChat account “Buyidao”

“Do they want China to just stand by and do nothing?”

Hua Chunying, a spokeswoman of China’s Ministry of Foreign Affairs, responding to accusations from Western politicians that China is using its epidemic assistance as a propaganda tool

“The authority of a technical department does not come from political power but from producing world-leading technology. We should leave professional matters to the professionals without any administrative interference that violates objective laws.”

Shao Yiming, a virologist at the Chinese Centre for Disease Control and Prevention (China CDC) calling for a scaling back of administration at the China CDC, in a recent interview with financial portal *Caixin*

“The pandemic merely triggered the fall of the financial markets in the US and Europe. Its root cause was the economic, financial and social fragility of long-term currency overissue.”

Economist **Ren Zeping** on his public WeChat account

Top Story PBoC Emphasises Reasonable Liquidity

The People's Bank of China (PBoC) announced on April 3 that it would cut the reserve requirement ratio (RRR) for medium and small banks by 1 percent.

This is the PBoC's third RRR cut in 2020, which it said will release about 400 billion yuan (US$58.5b) for loans in the long run.

The central bank also cut the interest rate on excessive reserves (IOER rate) from 0.72 percent to 0.35 percent on April 7, which has remained unchanged for 12 years. The week before, the PBoC announced it would reopen a seven-day reverse repo with the bidding rate being reduced to 2.2 percent from 2.4 percent. The reverse repo would release 50 billion yuan (US$7.4b) in capital.

China's GDP contracted 6.8 percent in Q1, the country's first reported economic contraction since 1992 when Beijing started releasing GDP figures.

Analysts said the measures are in response to the central government's demand of guiding a rate cut in the loan market and maintaining reasonable liquidity with flexible currency policies.

As many countries are trying to salvage their domestic economies from the Covid-19 outbreak by releasing too much stimulus, China warned against over-stimulation. Chen Yulu, a vice president of the PBoC, said in late March that the central bank will keep liquidity at a reasonable level.

The latest RRR cut targets rural banks, credit cooperatives and regional businesses. Another PBoC vice president Liu Guoqiang said that these financial institutions mainly serve small- and medium-sized enterprises (SMEs). The cut is intended to encourage more loans to SMEs which is important for the recovery of the physical economy.

To prevent too much capital from causing a logjam in the banks, the PBoC will implement the cut in two halves, on April 15 and May 15, 0.5 percent each time.

"Meeting market demand means we will never allow a money shortage. Of course, neither will we allow too much capital to be released nor a sharp depreciation. We must maintain a balanced approach," Liu said on April 3.

Liu said there were positive signs for the Chinese economy in March compared to February and the pandemic will not impose a long-term negative impact. He said that the PBoC has abundant tools and enough policy space to maintain stable economic growth.

Economy

Foreign Enterprises Resume Production

China's Ministry of Commerce (MOFCOM) said at a recent press conference that foreign enterprises in China are hastening resumption of production.

MOFCOM data shows that by April 7, 71.9 percent of the 8,776 foreign enterprises have resumed over 70 percent of their normal productivity and only 5.4 percent of enterprises are working at less than 50 percent capacity.

The production resumption has been quicker in the manufacturing sector, where 76.8 percent of foreign enterprises show that productivity is already more than 70 percent. According to Zong Changqing, director of the Department of Foreign Investment Administration under MOFCOM, 238 of 241 foreign-invested construction projects have started up again.

MOFCOM data conforms to China's Manufacturing PMI (Purchasing Managers' Index) in March which, according to the National Bureau of Statistics (NBS), rebounded to 52 percent, 16.3 percent higher than in February. A figure of over 50 percent indicates manufacturing growth.

An NBS official said the PMI growth was due to the wider range of production resumption, including that of more than 70 percent of SMEs.

Zong said that China, with an enormous domestic market still attracts investors with its advantages in industrial support, human resources and infrastructure.

On March 25, the American Chamber of Commerce in China published a survey revealing that 40 percent of foreign enterprises who responded said that they would maintain the same level of investment in China as planned, 17 percent higher than February.

Trade

Sourcing Woes

China's economy has taken a beating from Covid-19 to contract for the first time in decades, by 6.8 percent in the first quarter due to forced business shutdowns, according to official data. By contrast, China's economic growth rate slowed during the 2008 financial crisis but still stayed comfortably above 5 per cent.

Customs data also showed exports falling by 3.5 per cent in March set against the same period last year, while in January-February the year-on-year drop was larger at 15.9 per cent.

The trade position with the UK followed a similar trajectory with a 15 per cent year-on-year drop for February in exports from Britain and a 10 per cent fall in imports back to the UK from China. Despite these figures, China is still the UK's sixth-largest export destination and third-largest source of imports.

Commenting on the future outlook, China Britain Business Council analyst Torsten Weller predicted a rebound in China's slice of UK trade in March and April because London will not be able to source from locked down countries in Europe and North America.

Education

Back to School?

Higher education in the UK prospered greatly from international trade. Overseas students deliver one-third of all tuition fees income and China is the top source market providing almost 120,000 current students.

But a new British Council survey covering 8,500 prospective Chinese students to the UK revealed around 60 per cent are set to change their mind, citing coronavirus concerns. In bald figures 22 per cent said that they are likely or very likely to cancel their study plans, while 39 per cent said they are uncertain. Just 27 per cent said they are not likely to cancel, while some 40 per cent already studying overseas might not return to continue their courses.

"This will be a challenging year for international higher education, globally and in the UK", said Michael Peak, the British Council's senior adviser on education research. And in response umbrella body Universities UK has requested emergency cash and other support from the Government to plug the expected budget hole.

Culture

Waxing Poetic

The UK's BBC public service broadcaster has made a documentary about one of China's greatest sons, who lived around when the Vikings began their raids of the English coast.

In Du Fu: China's Greatest Poet, historian Michael Wood and Shakespearean theatre actor Sir Ian McKellen retrace the steps and tell the story of the Tang Dynasty poet and scholar who described the experiences of Chinese people facing challenges of war, famine and natural catastrophe.

Harvard University sinologist Stephen Owen has described Du's work as comprising "the greatest poems in the Chinese language". Owen also compared him to the West's greatest literary figures by saying "there is Dante, there's Shakespeare and there's Du Fu".

Poets and poetic tradition have a special place in Chinese hearts and in their words represent the realities of Chinese history. "For generations he (Du) has been the guardian of the moral conscience of the nation," said Wood.

International

Repatriation Efforts for Overseas Chinese Prioritise Children

The Civil Aviation Administration of China (CAAC) announced on April 15 that by April 14, China had arranged 16 charter flights to repatriate 2,744 citizens from abroad.

As the Covid-19 pandemic is sweeping across the globe, a growing number of overseas Chinese, especially young overseas students, are appealing for help to return home. The severe curtailment of flights from overseas carriers and Chinese restrictions on the number of flights per country has led to sky-high prices for tickets and price gouging.

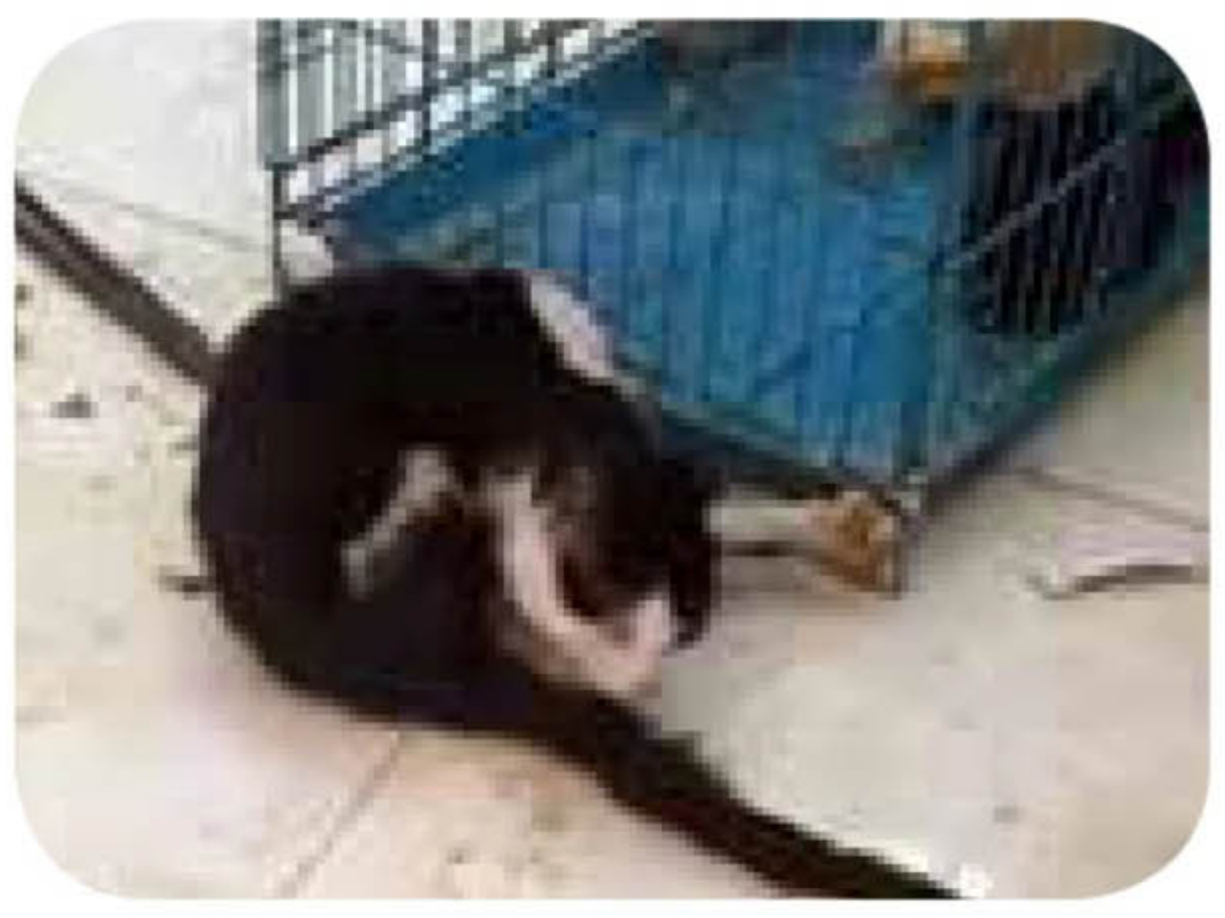
The number of nationals living overseas meant a widespread repatriation effort would be hard. There are reportedly some 1.4 million students studying overseas alone. Repatriation flights have prioritised hard-hit countries like the US and the UK, where many junior and high school students are studying without family.

China's civil aviation authority pledged they will continue to help nationals who want to return. The Ministry of Foreign Affairs said it would stay in close contact with citizens abroad. China's embassies have already distributed around 500,000 of what they call "health packages" to overseas nationals which generally contain face masks and traditional Chinese medicine.

Photos by CNS, VCG

NETIZENW@TCH

Uni Student Tortures Stray Cats to Death



A university student sparked outrage for brutally abusing the stray cats that roam his campus and posting footage online. In the videos, Fan Yuanqing of Shandong University of Technology is seen burning and electrocuting the cats. In other clips he guts and skins them while they are still alive. Media reported that Fan has similarly abused 80 cats over two months and profited from the uploaded videos. While his unsettling acts provoked shock and anger from netizens, Fan does not face charges as there are no laws in China that explicitly prohibit animal abuse. The school forced Fan to issue a public apology and later expelled him, but netizens said the punishment was far from enough. Some said that Fan's violent behavior suggests mental health issues that could manifest in worse ways if not addressed.

Yellow Weasel Wins Hearts in Wuhan

The people of Wuhan, the centre of China's Covid-19 outbreak, weren't the only ones excited about the city ending its 76-day lockdown on April 8. A video of a yellow weasel scurrying in and out of a Wuhan crowd looking for food has made the rounds on social media. The cute mammal amused many in the video, who came up to feed him. In the clip, one person said that yellow weasels used to be a rare sight in the city, but they might have had a tougher time finding food during Wuhan's two-month lockdown. Netizens joked that even Wuhan's animals are happy about the city returning to normal.

Teen Accuses Foster Father of Repeated Rape

A prominent lawyer and oil company executive has resigned amid allegations he had repeatedly raped his teenage foster daughter and held her captive in his home. Bao Yuming, vice president of Jereh Group and former adviser to telecom giant ZTE, stepped down after police in Yantai, Shandong Province announced they would reopen the investigation. According to Xingxing (pseudonym), now 18, Bao had informally adopted her in 2015 from her single mother, and claims he began his sexual abuse in 2016 soon after she turned 14 years old. In her police report, Xingxing described years of living under constant video surveillance in Bao's home, where he forced her to watch child pornography, pose naked for photos and have sex. Li had turned twice to Yantai police for help, only to be turned away for lack of evidence. Bao has publicly denied the accusations of rape and claimed that he and Xingxing were lovers. But netizens suspected that Bao had used his legal expertise to exploit Chinese law, since the minimum age for consensual sex is 14 years old. The Ministry of Public Security and the Supreme People's Procuratorate have sent teams to supervise the investigation and legal proceedings.

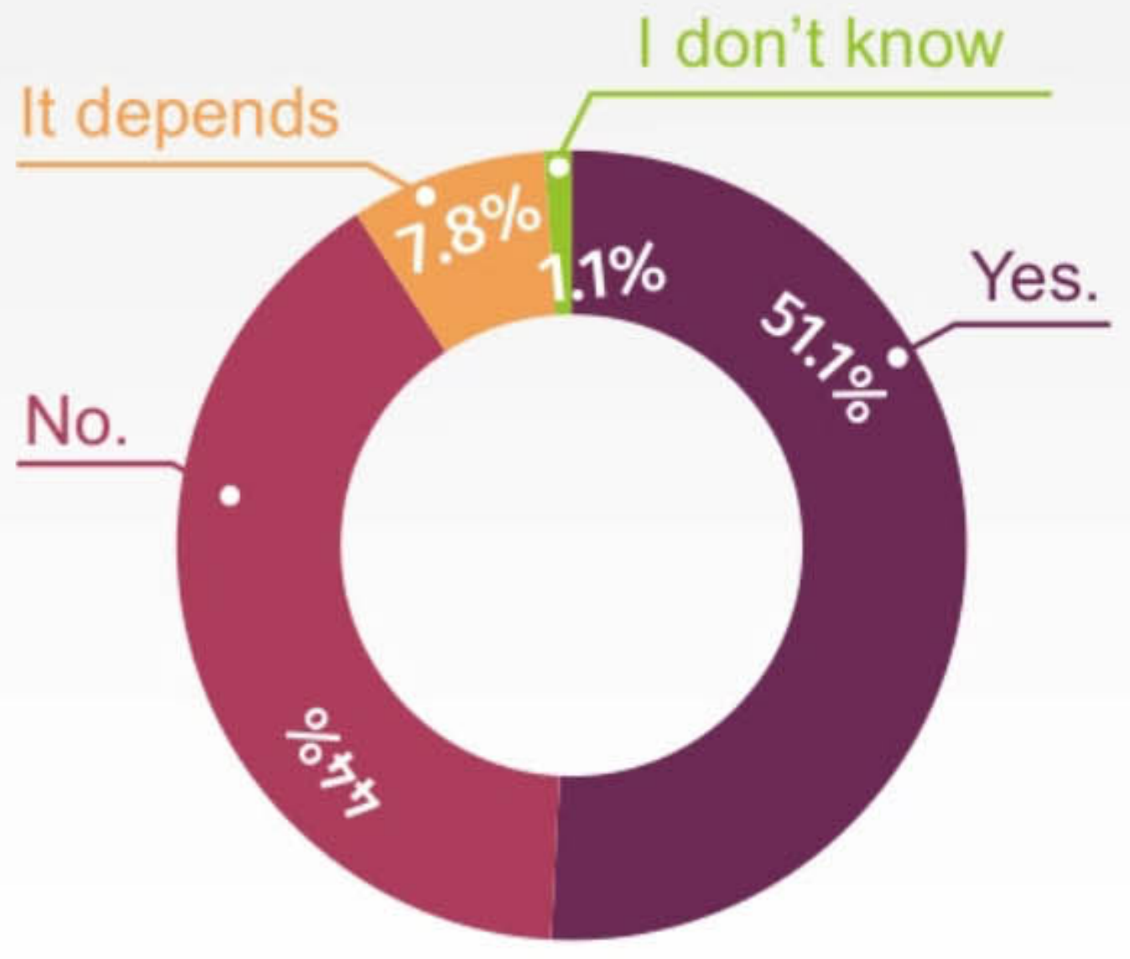
Murderer Gets Sentence Reduced 9 Times, Kills Again

Police in Beijing arrested a man for beating an elderly man to death who criticised him for pulling down his face mask in a shop during the Covid-19 outbreak. But netizens were further outraged to find the man had been released from prison seven months earlier after having his sentence reduced nine times on a murder conviction. Guo Wensi, 38, was originally sentenced to life in prison for killing his girlfriend in 2004. However, Guo's sentence was commuted nine times between 2007 and 2018. He served 14 years for the crime. In March, he attacked the 72-year-old man in a Beijing shop and fled the scene. The man died six days later in hospital from his injuries. Since China has strict requirements for commuted sentences, netizens speculated that corruption played a part in the court decisions. Legal authorities in Beijing have formed a task force to investigate the reduced sentences in question.

Poll the People

Shenzhen published a draft law on March 31 that bans the consumption of cats and dogs. While lawmakers said the ban reflects the values of a modern society, some opponents argued that the law reflects Western values, which should not have the final say on which animals are acceptable to eat.

Do you support Shenzhen's ban on cat and dog meat?

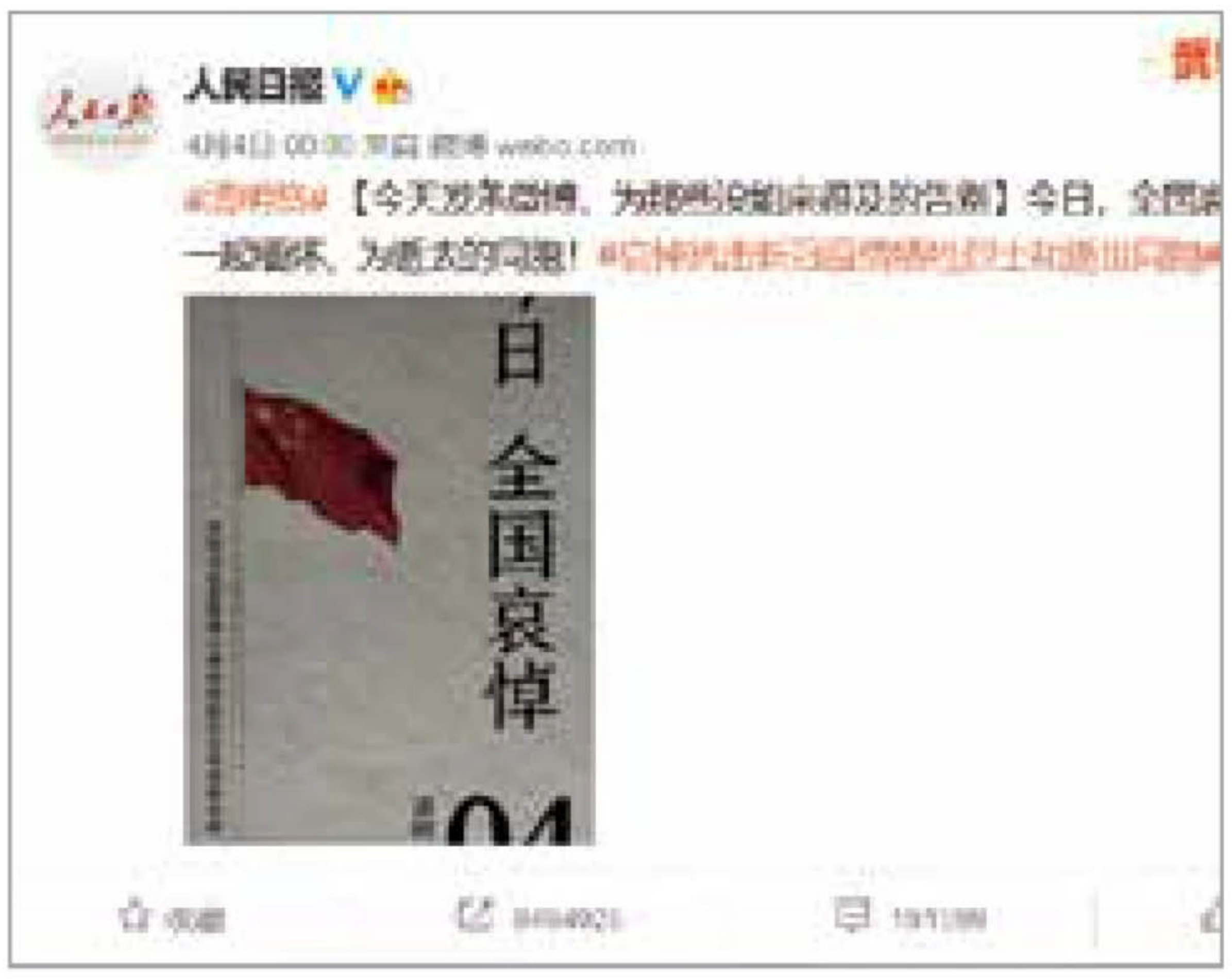


Source: Sina blog "Beijingren buzhidao de Beijing Shi'er"

Most Circulated Post

Reposted 8,494,925 times by April 11

"This post is for the farewells we didn't say in time."



人民日报

Cities nationwide marked China's day of mourning for the victims of the Covid-19 epidemic with a chorus of air raid sirens and car horns at 10 am on April 4. In a post on Sina Weibo that day, Party-run paper the *People's Daily* called for netizens to remember those who died.

TOP FIVE SEARCH QUERIES

On Baidu百度 *for the week ending April 19, 2020*

1. Executive Resigns Amid Teen Rape Allegations 281,763
Bao Yuming stepped down as vice president of Chinese energy company Jereh Group as police investigate allegations he had repeatedly sexually abused his adopted daughter since she was 14 years old.

2. Work Resumes as Wuhan Lifts Lockdown 133,514
Wuhan removed all surrounding roadblocks on April 8, allowing people who were locked down in the Hubei Province capital to return to their jobs in other cities.

3. Covid-19 Cases Surge in US 77,314
The cumulative number of confirmed Covid-19 cases in the US surpassed 670,000 as of April 17.

4. Forest Fires Kill 19 in Sichuan 54,232
A forest fire on the outskirts of Xichang, Sichuan Province that raged between March 31 and April 2 killed 18 firemen and a forestry worker. What caused the fire is still unknown.

5. Luckin Coffee Admits to Sales Fraud 26,997
Chinese chain Luckin Coffee saw its stock prices plunge by over 75 percent on April 2 after it admitted to forging sales figures in its fiscal reports.

TOP BLOGGER PROFILE

Joan Chen

Followers: 1,943,103 by April 14, 2020

After a long hiatus from the Chinese internet, actress Joan Chen has recaptured attention on Weibo for sharing her personal experiences during the coronavirus. With more than 670,000 confirmed Covid-19 cases in the US, Chen's posts describe how ordinary people are fighting the virus from home. Unlike other bloggers who focus on the suffering of patients and frontline workers, the 59-year-old Chinese-American actress talked more about her thoughts on life as society slows down in quarantine. People learn from tragedy, Chen said in an interview with *Beijing News*, and the pandemic has given people a chance to appreciate the many beautiful things in life like nature and family. Chen also called on people to abandon discrimination, which does nothing to fight the virus. "The world has been rushing forward like a violent flood and we have become too agitated to think and face up to ourselves," she wrote in one post. "Covid-19 brought about bitter suffering and death and forced us to press pause on our lives. What should the survivors learn from the pandemic about human values and tolerance?" she continued. The post received more than 40,000 likes and nearly 18,000 shares.

WHAT'S HOT? WHAT'S NOT?

AR Fashion Show

Coronavirus safety was in style during a livestreamed "virtual fashion show." Hosted by Alibaba as part of Shanghai Fashion Week, the show used augmented reality (AR) technology to create a virtual catwalk for medical masked models to show off the latest from independent designers. Media reported that the show attracted around 2.5 million viewers within the first three hours.

Hardcore Home Workout

Liu Chuanhe, a student at an athletics high school in Suzhou, Anhui Province, earned some online fame after media reported that he has continued his training regimen at home for 82 days straight during the coronavirus lockdown. Living in a rural village, Liu would weight train with bricks, rocks and even people. Video clips show him running up a hill while dragging a huge tire and doing squats with his grandpa sitting on his shoulders. Netizens said that champions never give up no matter how bad the situation.

Zoo's April Fools

A zoo in Changzhou, Jiangsu Province has come under fire for dyeing zebra stripes on a donkey. The zoo claimed the dye job was an April Fool's Day joke and also aimed to educate children on how zebras differ from horses and donkeys. Some accused the zoo of mistreating the animal.

Covid Patient Bites Nurse

A coronavirus patient in Guangzhou, Guangdong Province reportedly bit an ICU nurse while receiving treatment for Covid-19 in late March. Media reported that the man, a Nigerian national, tested positive for Covid-19 but had refused to stay in the isolation ward or undergo further tests. When the nurse came to stop him from leaving the ward, he threw her onto the floor and bit her on the face, neck and waist. The man is receiving treatment in custody. Guangzhou police said they plan to prosecute once his treatment concludes.

SOME OF THE IMAGES USED IN THIS SECTION ARE FROM THE INTERNET

PHOTO BY VCG

Environmental Law

Plastic packaging is widely used in the express delivery industry

Shrinking the Wrapping

China's new ban on single-use plastic bags is applauded for highlighting excessive plastic waste in express and takeout business, but experts question how far it can go without legal backing

By Su Jiede

China is implementing new measures to ban single-use plastic bags to combat white pollution. The ban announced by China's National Development and Reform Commission (NDRC) and Ministry of Ecology and Environment on January 19 came after a policy targetting shopping malls and traditional markets proved ineffective.

Consumers have become so used to paying for plastic bags or being handed them by vendors that they no longer pay attention to the issue of reducing single-use plastics. In addition, the enormous growth in home delivery services, from e-commerce sites to takeout delivery platforms, has increased plastic waste. Any gains made from the initial plastic bag ban have been lost.

The previous ban that started in 2008 helped save about 70 billion plastic bags from being handed out by retailers between 2008 and 2016, equal to 8.75 billion a year, the State-run China Central Television (CCTV) reported in 2018. In 2016 alone, China's express delivery industry used some 14.7 billion bags while takeout delivery platforms, Baidu Waimai, Ele.me and Meituan, used 7.3 billion.

The ban, updated from 2008, includes the delivery and take-out sectors as they pose new pollution challenges. It covers a wider range of plastic products and sets graded goals for different regions. Although an important step to make changes, if there are no supporting policies or legally binding regulations, environmentalists question how effective the new guidelines will be.

Protracted Battle

One of the largest consumers of plastic products in the world, China has been attempting to reduce plastic waste for the last two decades. In 2001, it banned the production of disposable foam plastic tableware after it was widely used on trains and caused severe pollution. The policy swung back and forth after that, diluting the ban.

A wider campaign against plastic waste came between 2007 and 2008 when authorities prohibited the production, sale and use of plastic bags less than 0.025 millimetres thick and banned sellers from providing free plastic bags. But many argue these rules were not effective. Xie Xinyuan from the China Zero Waste Alliance (CZWA), an organisation focusing on waste treatment, told *ChinaReport* that the ban restricts only plastic bags with handles, with no mention of plastic film wrap or other types of plastic bags in supermarkets.

CZWA found that fresh food markets are the worst for single-use plastics. Since the initial ban on single-use bags 12 years ago, market inspectors would enforce the rules every so often, but sub-standard plastic bags would reappear.

China has so many shops, farmers markets, restaurants and peddlers that it is unrealistic for regulators to police the use of plastic bags effectively. "Some sellers play a game of peek-a-boo, taking out standard bags for inspection and providing cheaper sub-standard ones behind their backs," Yang Limin, a teacher at the Shanghai University of International Business and Economics, wrote in an article published in the *Journal of Zaozhuang University* in 2018.

Deng Yixiang, a researcher at the Chinese Research Academy of Environmental Sciences, attributes the failure in supervision to the blurred separation of duties between environmental, market supervision and farming agencies. He added that previous policies were mainly guiding principles with no legal backing to impose punishments, so enforcement is hard.

Charging for plastic bags has not been successful over the long term. At first, plastic bag use in shopping malls and supermarkets did shrink drastically. But consumers soon became used to paying for bags, and the price is low, about 0.3 yuan (US$0.04) each, so now more bags are used again.

Taking into account the outcome of the previous measures, lawmakers started soliciting public opinion on the plastic waste problem on the NDRC website in early 2018. It took two years for the new ban, which was postponed several times, to be applied.

"The lawmakers spent at least two years learning about plastic," said an official from the plastic industry association who asked for anonymity, noting that it reflected that more prudence had gone into the new rules.

New Challenges

The new policy bans the production and sale of disposable plastic tableware and cotton swabs, it bans the production of household products with microbeads, which are widely used in cosmetics and are solid plastic particles less than 1 millimetre in diameter. It also sets a graded timetable, by the end of 2020, 2022 or 2025, for the complete prohibition of different products in regions at different levels of economic development.

Most importantly, the ban stresses the increasing deluge of plastic waste brought about by the express delivery industry, e-commerce and the takeout sector. In 2019, there were 63.52 billion express deliveries in the Chinese mainland, a year-on-year increase of 25.3 percent, according to China's State Post Bureau. A survey conducted by NGOs, Greenpeace, Break Free From Plastic and the All-China Environment Federation, found that in 2018, plastic packaging used in deliveries amounted to 851,800 tons, nearly 10 percent of total packaging.

The use of non-biodegradable plastic packaging and single-use plastic woven bags will be first banned in delivery outlets in places including Beijing, Shanghai and Jiangsu Province and then all plastic, including Scotch tape, will be banned nationwide by the end of 2025, the policy reads.

Trustdata, a mobile internet data provider, said that turnover in China's takeout industry in 2019 would reach 603.5 billion yuan (US$85.6b), an increase of 30 percent over 2018, and it keeps rising fast. Greenpeace found that each takeout order uses an average of 3.27 disposable food containers. In that case, if the orders Meituan received daily surpassed 30 million, as its founder Wang Xing revealed in July 2019, then this company alone would consume more than 90 million disposable plastic containers a day.

Non-biodegradable plastic straws will be banned in restaurants nationwide by the end of 2020, while non-biodegradable plastic tableware in restaurants and takeouts in cities above county level should drop by 30 percent by 2025, says the guideline.

Challenges in achieving this goal are evident. In September 2017, the Green Volunteer League of Chongqing, an environmental protection organisation, sued Baidu Waimai, Ele.me and Meituan for causing severe pollution. After that, Meituan and Ele.me allowed customers to check a box on the order page saying they did not want single-use plastic tableware, such as cutlery and chopsticks, to be included with their order. But the effect was not obvious. "We can encourage restaurants and customers to reduce the use of disposable plastic containers, but we are not in a position to force them to do so," said an employee from Ele.me, who asked not to be named.

"Currently, there are no specific laws and regulations to address the problem. E-commerce platforms cannot force online shops to use certain kinds of packaging, nor do they have the right to promote environmentally friendly plastic products through agreements," said Guo Hu, a lawyer from Jingsh (Hangzhou) Law Firm.

Jiang Jianguo, a professor at the School of the Environment at Tsinghua University, told *ChinaReport* that decisionmakers are in a dilemma when dealing with these emerging types of business: Encouraging the enterprises to figure out solutions takes time, but adopting coercive measures might harm development.

Dubious Alternatives

Meanwhile, the guideline stresses the importance of promoting substitutes such as non-plastic and biodegradable plastic products. It may provide an opportunity for companies that produce biodegradable materials, business analysts said. In Hainan Province, which in February 2019 released a plan to ban non-biodegradable plastic products, biodegradable plastic is already starting to attract more attention as the most feasible substitute. Liu Wei, vice president of Hainan Saigao New Material Company, the only company in Hainan capable of producing biodegradable materials, said that his company is "hot" now, with a busy schedule of meeting customers and government officials.

Biodegradable plastics have never been used at scale in China. Market demand has been low. In the last 20 years, many manufacturers were interested in producing biodegradable plastics, but few survived. Liu said they started production in 2006, but it has been a long struggle.

"The biggest challenge is low social acceptance. People think these products are too expensive," Liu said. He explained that both supermarkets and farmers markets are reluctant to use biodegradable bags that cost a bit more than ordinary ones, which either leaves them little profit from selling bags or, if they raise the price, might scare away customers.

Before Hainan, Jilin Province in North China tried to promote biodegradable products in 2015, but the five-year effort fell far short of expectations in provincial capital Changchun, CZWA found.

Xie said that nine companies producing biodegradable plastics were established in an industrial park in Changchun, but by May 2019 three had gone bankrupt and three had halted production. The other three either depend on exports or keep losing money. These companies could not get enough orders from the domestic market to maintain normal operations. The subsidies or preferential policies the government had provided were gradually reduced or cancelled.

CZWA surveyed 18 plastic bag shops at the biggest wholesale market in Changchun and found only five sold biodegradable bags. The organisation also found that 41 percent of retail stores in the city provided biodegradable plastic bags and 53 percent of those interviewed said they did not know how to distinguish the two. Only 1.4 percent said they would use biodegradable bags for perishable waste.

The main problem is that biodegradable plastic bags will not degrade when half of the people are still using non-biodegradable, noted Xie, explaining that in compost degradation any mixture of non-biodegradable plastics would affect the process.

Wang Jun, professor of packaging engineering at Jiangnan University in Wuxi, Jiangsu Province, told *ChinaReport* that there are also problems with the industry, such as low production capacity, high costs and the fragility of biodegradable materials in industrial processing, which may pose challenges to supply.

Holistic Issue

The biggest problem with plastic bags is not what they are made of, but that they are disposed of after a single use without being properly recycled, experts said.

To address the problem, the new policy proposes building a management system regarding the production, circulation, usage and recycling of plastic products. "It's a step forward in focusing on building an overall industrial chain surrounding plastic recycling. It proposes a management system to cover every link of the industry as well as a framework for supervision, policy and scientific research and development," Jiang Nanqing, secretary general of the China Synthetic Resin Association's plastic recycling branch, wrote in an article published in the *People's Daily* (Overseas Edition) in February.

But Jiang Nanqing said that the new policy is only a guideline and different places need to devise policies based on their own conditions. She suggested holding manufacturers accountable. "Producers should be responsible for the discarding and scrapping of plastics [in their products] instead of having recycling companies pay to do it," Jiang said.

In the European Union, the cost of running the recycling system for renewable resources is shared by government and the producers, Jiang said, which includes both brand manufacturers and chemical enterprises in the upstream of the plastic industry.

The lack of a sound recycling system has been one critical problem with chronic plastic pollution. "There have been clear plans on recycling renewable resources that pointed out how to address plastic recycling, but there have been no feasible plans for how to implement it," said Jiang Nanqing.

Many experts concerned with plastic use and recycling believe that authorities should take into account the lessons of the past, which show that depending on consumer consciousness or charging for bags should be abandoned completely. The problem will never be solved without strong regulation or mobilizing the involvement of every link in the chain, from manufacturers to users and recyclers.

"The new ban is significant. But we need to see what effect it will have in practice," said Tang Damin from Greenpeace China, adding that environmental protection organisations and scholars are expecting that further policies to support the single-use plastic ban will have to be rolled out.★

Education

WORKING CLASS

China's renewed emphasis on labour education in schools has garnered both welcome and worry. Critics warn that lack of detailed policy not only hinders efforts but also risks taking it to extremes

By Xu Tian

Students from a school in Guangxi Zhuang Autonomous Region pick tea at a local campus labour education base

Photo by Gong Pukang

China is looking to put labour education back on the national curriculum to instill a stronger work ethic among students at all levels. On March 20, the Communist Party of China Central Committee and the State Council unveiled guidelines proposing that schools make labour education compulsory. They also encourage colleges to establish courses in labour education and that high schools include labour achievements among their admissions requirements.

The guidelines sparked fierce debate in media and online. Some said they address perceived trends among adolescents in China such as a lack of respect for manual labour and workers, while others have expressed concern that such programmes might focus solely on physical labour without consideration for the nuances of the modern workforce. What's more, the education community has yet to agree on how to define labour education, how to carry it out and how to assess it.

Traditional Values

Labour education has been part of China's education system for several generations. It began in the 1950s after the Party's education policy – a combination of education and productive labour – was written into China's Constitution. As part of mandatory labour education programmes, students worked in rural areas and factories to broaden their understanding of society. But this went to extremes during the Cultural Revolution (1966-76) and the Down to the Countryside Movement, where millions of urban students were sent to live and work in rural areas to learn from farmers. In many cases, the move was permanent.

The policy ended in the 1980s following China's reform and opening-up, when labour education was integrated into the middle school curriculum. A combination of education, skills and social practice was the guiding policy in the 1990s, an approach to cultivate industrious attitudes among students. A round of reforms of fundamental education in 2001 merged labour skills into a "comprehensive practical activity" course that aimed to cultivate hands-on learning and innovation.

But in recent years, emphasis on exams and academics has marginalised labour-oriented education. In many cases, labour education is overlooked because it does little to prepare students for entrance exams. The classes are usually taught by overworked teachers on top of their regular workload and involve activities as simple as cleaning the classroom.

Many are calling the resumed emphasis a "rebirth" of labour education. If fully implemented, course designs and new material would affect the entire education system.

Specifically, the guidelines suggest that primary and middle schools set aside at least one hour for labour courses every week, regulate students' extracurricular work and set a yearly "labour week" for students to "work collectively."

They also suggest that colleges integrate labour education into their core curriculums and require at least 32 credit hours of it for a bachelor's degree. Vocational schools are instructed to implement labour education through training classes besides at least 16 credit hours dedicated to learning about "the spirit of hard work and model workers."

The guidelines suggested that primary schools emphasise the importance of labour and developing a work ethic and that middle schools focus on specific skills and encourage students to take part in labour. High schools should enrich students' work experience and help develop skills, while colleges should address innovation, entrepreneurship and social practice to sharpen problem-solving abilities and foster a "right view" about employment.

To ensure that schools and society at large take it seriously, the guidelines also suggested that schools include labour education in their student evaluation systems, create incentives and hold contests involving labour activities.

Besides compulsory courses, the guidelines also encourage other courses to integrate content involving labour education. In an article published in the State-run *People's Daily* newspaper on March 30, China's Minister of Education Chen Baosheng wrote that courses such as history, language and art could include content that reflects on the significance of labour, glorifies workers, and highlights traditional values such as diligence and hard work. Courses like maths, geography and science should help cultivate an innovative spirit and attitudes towards technology, the article read.

"A comprehensive, practical, inclusive and targeted curriculum should be formed to implement the new requirements for labour education," Chen wrote.

Getting Worked Up

Labour education has gained attention in recent years. On September 10, 2018, China's Teachers' Day, Chinese President Xi Jinping highlighted the significance of labour at the national education conference, calling for more emphasis on developing a strong work ethic in education to help cultivate students into hardworking, honest and creative citizens.

"In recent years, some teens do not value, have no interest in or are not capable of hard work. The value of education through labour is overlooked to some degree," read the guidelines.

In a society where grades are everything, teenagers often get a pass on doing chores both at home and school. Guidelines advocates say it is increasingly common for students to lack common knowledge about labour-intensive work such as agriculture; mistaking wheat seedlings with Chinese chives, for example.

Many scholars believe schools need separate labour courses to reverse this trend. But there remains controversy over the definition of labour in a rapidly changing society.

The guidelines focus on physical labour and call for students to do daily chores, productive tasks and service work to "give them hands-on practice and make them sweat." In his article, Chen wrote that the focus of labour education should be manual labour and students should go to factories, rural areas and communities to complete specific tasks. "Now students mostly grow up with sufficient means of subsistence. It is more important to train them in the spirit of hard work," Chen wrote.

Tan Chuanbao, head of the moral education research centre at Beijing Normal University, pointed out the concept of labour has changed drastically with time. Compared with the 1950s when agriculture was a pillar industry, tertiary industry now makes up more than half of China's total GDP. Tan argued it would not be proper to emphasise industrial and farming skills and separate labour education from academics.

> **In a society where grades are everything, teenagers often get a pass on doing chores both at home and school. It is increasingly common for students to lack common knowledge about labour-intensive work such as agriculture.**

Tan said a combination of physical and mental work should prevail. For example, modern agriculture, which uses greenhouses, drip irrigation systems and other technological improvements, differs from farming practices decades earlier. He held that although it is necessary to familiarise students with physical work, too much emphasis on that point would not best serve the times.

Interviewed experts suggested that authorities avoid sweeping labour education policies but schools, whether rural, suburban, or urban, should find methods that best suit their circumstances.

If labour education is included in high school entrance requirements, its standards and expectations must be clearly defined, experts also pointed out.

The guidelines read that labour education aims to cultivate among students a "right view of the world, life, values and labour" and "guide them to respect and have an interest in doing labour." During an official seminar about labour education in March 2018, Tan said that its core purpose is not teaching students how to plant crops or work on an assembly line, but to value labour.

Wang Jian, deputy Party secretary of the College of Education at Shanghai Normal University, echoed that labour education could also help draw China's hyper-connected youngsters back into the real world and improve their social skills.

Unlike previous labour skill classes, the achievements of labour education are too abstract to measure with precision, which makes specifying implementation guidelines a challenge, experts observed.

In recent years, education authorities have also called for including ethics and arts in school admission evaluations. But these metrics would also pose assessment challenges. "If quantifying ethics, for example, were to add a point for every good deed, then is the system encouraging students to do good deeds or to gain points?" Tan said.

Interviewed experts suggested assessing labour with comments instead of scores. But if not quantified, parents and students are likely to ignore labour education to focus more energy on getting higher exam scores.

But beyond establishing standards, it is important to push all primary and middle schools to carry out labour education and give students work experience, Wang said.

Experts argued that it is still too early to create labour education majors in colleges. Tan said there is still a need for more fundamental research into labour education and support from authorities to move forward. ★

HEALING THE SCARS

As China begins its recovery from the Covid-19 pandemic, *ChinaReport* assesses the impact of the mass mobilisation the country undertook to defeat the virus

Photo by Xinhua

Photo by VCG

Covid-19

THE GAP IN GLOBAL GOVERNANCE

There is dire need for coherent governance and global cooperation in the fight against the Covid-19 pandemic

By Yu Xiaodong

Since the first case of Covid-19 caused by the novel coronavirus SARS-CoV-2 was reported in early December 2019, the disease has caused a global pandemic, which has spread to almost every corner of the planet, infecting almost 2 million people and causing over 119,686 deaths worldwide.

As the pandemic is set to stick around for months if not years, while spreading to the less developed parts of the world including Africa and South America, there are concerns that the current outbreak is just the beginning. Stronger global cooperation will be needed to contain and mitigate its health and economic impacts.

On April 7, an international group composed of 205 former presidents and prime ministers, along with current government, health and economic leaders from 74 developed and developing countries released a call to action, with an open letter demanding the creation of a G20 executive task force and an immediate global pledging conference. The plea requested world leaders to commit to a US$8 billion fund to hasten the global effort for vaccines, cures and treatment, US$35 billion to support health systems and buy equipment, as well as US$150 billion for developing countries to fight the virus.

US Absence

In early March, the G20, composed of 20 of the world's largest economies which account for 80 percent of global GDP, held an emergency summit over the coronavirus and pledged to do "whatever it takes" to tackle the crisis that threatens all humanity. Unfortunately, with the US appearing to be absent, if not actively disruptive from a global leadership role, engaging in a blame game with China and other international organisations, strong global collaboration on the issue appears to be out of reach.

The same day the open letter was released, US President Donald Trump lashed out at the World Health Organisation (WHO), criticizing the agency's response to the Covid-19 pandemic. One week

Workers at Harbin Taiping International Airport inspect a Russian transport plane that will bring a Chinese Covid-19 expert team to Russia, April 11, 2020

later, Trump announced that it would halt funding to the WHO. This is a big step on from the proposed 2021 budget the Trump administration made in February when it said it would make more than half voluntary contributions to the WHO to about US$58 million.

Earlier in March, Trump and US Secretary of State Mike Pompeo repeatedly referred to the virus as the "Chinese virus" or "Wuhan virus," which critics said was intended to divert criticism over Washington's handling of the crisis.

While triggering a diplomatic brawl with China, the US insistence on describing the health crisis as distinctively Chinese also thwarted the efforts of the UN Security Council and the G7 group to agree on a global response in early March.

As the US now has the highest number of infections and deaths due to Covid-19, it has joined the race to acquire scarce medical suppliers and protective equipment, prompting countries to complain about allegedly unfair practices conducted by the US and fuelling tensions between Washington and its allies.

In early April, officials in France and Germany accused the US of using unfair means to intercept medical supplies procured by their own countries in transit to the US. Berlin Interior Minister Andreas Geisel described the US practices as "modern piracy," accusing Washington of diverting a shipment of masks intended for German police from Thailand. Washington denied the accusations, saying the American buyers were unaware the supplies were earmarked for other countries.

Even so, news of the US flying out half a million diagnostic swabs made in Italy at the same time that a Chinese plane carrying 30 tons of medical supplies arrived in Italy, sent a clear message about the US's absence from global leadership.

In what seems like an attempt to repair the damage, the Trump administration announced on April 11 that it would provide "a robust assistance package" to Italy. According to the US state department, the package will involve the 30,000 US military personnel stationed in Italy, who will assist the Italian government by providing medical supplies, humanitarian relief and other assistance in the fight against the coronavirus. Pompeo also announced on April 7 that the US will commit an additional US$225 million to bolster the global response to the coronavirus.

But given the Trump administration's record in cutting foreign aid in the past years, it remains to be seen whether the US is just paying lip service. When China was first struck by the outbreaks, Pompeo made a high-profile announcement on February 7 to offer US$100 million to help China and other countries in their fight against the virus. But on March 20, China said that it had not received a penny from the US government.

China on the Defense

In the absence of the US, China appears to be taking a prominent role by actively calling for global cooperation in the fight against the virus. As China has largely brought the outbreak under control in the Chinese mainland and resumed much of its industrial production, China has become a major provider of medical suppliers. At a regular press briefing in Beijing on March 31, Hua Chunying, spokeswoman of the Ministry of Foreign Affairs, said that it has provided medical supplies to 120 countries and four international organisations.

According to China's Ministry of Commerce, between March 1 and April 6, China provided and exported more than 3.86 billion masks to 50 countries, along with 37.5 million protective gowns, 16,000 ventilators and 2.84 million test kits.

This led many Western analysts to warn against China's "exploiting" the crisis in its alleged pursuit of global primacy. But from a domestic perspective, China's approach in promoting global cooperation in the fight against the virus has been rather prudent and cautious.

On the one hand, China has to fend off criticism from the West for its handling of the crisis in the early stages and a long-held suspicion over its strategic intentions behind its calls for global cooperation. On the other hand, the Chinese government faces strong domestic pressure to not overly commit itself, especially when the country faces the threat of a second wave of outbreaks and is challenged by a struggling economy.

Since February, China has sent seven medical teams to five countries, including Italy, Iraq, Iran, Serbia and Cambodia. Chinese officials described the support as reciprocal. When asked about whether China is trying to export the "Chinese model" of governance at a regular press briefing on April 9, Foreign Ministry spokesperson Zhao Lijian said that China's support is aimed at "reciprocating the goodwill" China had received early on. "We have never exported the Chinese model to anyone, nor asked anyone to copy China's methods," Zhao said.

In explaining why China's medical team sent to Italy is mostly composed of experts from Sichuan Province, Shen Ji, head of the provincial health committee of Sichuan, told domestic media that it is a reciprocal gesture to return the favour provided by Italy, which came to China's aid after the 8.0 magnitude Wenchuan earthquake which struck on May 12, 2008 and caused more than 80,000 deaths. Shen said that back then, Italy sent a team of 26 medics and technicians and built a field hospital that treated more than 900 patients.

Saying that China will provide medical supplies to countries in need, spokeswoman Hua Chunying stressed that China's top priority remains the prevention and control of the epidemic at home. "China's fight against Covid-19 isn't over yet, and we are under heavy pressure to guard against imported cases and a rebound in domestic cases," she said.

Post-Pandemic World

For many experts, China has good reason to be cautious. During a seminar held on March 29 in the School of International Studies (SIS) at Peking University on the pandemic's impact on world poli-

Chinese experts pose with Italian doctors at a hospital in Padova, Italy, March 18, 2020

PHOTO BY VCG

A batch of medical protective equipment provided by the Chinese government to France arrives at Paris Charles de Gaulle Airport, March 17, 2020

PHOTO BY VCG

tics, the consensus among experts was that as the US shift in policy from global leadership to great power politics would lead to increased US hostility towards China in the post-pandemic world.

Lei Shaohua, assistant professor at the School of International Studies of Peking University, said the US-China relationship has been hijacked by the health crisis.

As Trump's argument that China should take responsibility for its own failure to prevent the outbreak has gained traction in American society, Lei warned the bilateral relationship may enter a dark period in the post-pandemic world. "The more the US suffers during the Covid-19 outbreak, the more difficult the US-China relationship will become," Lei said.

According to Wang Yong, a professor and director of the American Studies Centre at Peking University, by triggering worldwide economic and financial crises, coupled with a steep drop in oil prices, the Covid-19 pandemic has injected some serious additional uncertainties into an already tumultuous world which had already been affected by the Trump administration's "America First" agenda.

"The strategic and geographic rivalry, as well as competition over ideologies and development model will intensify following the pandemic," Wang said.

For Chu Xiaobo, a professor at SIS, the global pandemic could have been an opportunity for leaders around the world to realise the importance of global cooperation. On the contrary, Covid-19 has led to a further rise of nationalism and xenophobia, said Shu Xiaobo. Chu warned that Covid-19 could bring major changes to the model and operation of the global governance system.

According to Zhang Haibin, another professor at SIS, the problem of the global governance system lies in its fragmentation. The pandemic has served to reveal the importance of more robust global cooperation in the health sector. For this to happen, the US and China must have a basic cooperation framework, which Zhang said is clearly missing in the current political atmosphere.

"Global cooperation on health issues has long been considered the one with the least political sensitivities," Zhang said. "If countries can't cooperate with each other in this area, it is hard to believe that they can effectively cooperate in any other."

Grounds for Optimism

But not everybody is so pessimistic about the prospect of global governance. Wang Dong, an associate professor of social sciences at Peking University, argued that globalisation in the past decades has not been led by politicians but by technological development. "The pandemic has actually exposed our reliance on technology, and the setback to globalisation brought by the Trump administration will only be temporary.

"In the past decades, the world has gone through a number of global crises that could jeopardise globalisation, but globalisation accelerated nevertheless," Wang said. Wang's view appeared to be echoed by that of Bill Gates, co-founder and former CEO of Microsoft.

In an online interview with TED's Chris Anderson on March 24, the philanthropist billionaire who runs the Bill & Melinda Gates Foundation and has contributed up to US$100 million to the global response to Covid-19, said that he was so encouraged by cooperation among the science community around the globe that he believed the world would even apply learning from the Covid-19 response to other tough issues like climate change.

In an article published in *The Sunday Telegraph* on April 12, Gates called for a "global approach" to fighting the disease. "Humanity, after all, isn't just bound together by common values and social ties. We're also connected biologically," Gates wrote. "In this pandemic we are all connected. Our response must be, too."★

People gather to pray during the Covid-19 pandemic, Nairobi, Kenya, March 29, 2020

Photo by VCG

Covid-19

THE WORLD'S WEAKEST LINKS

If not addressed soon, the inadequate disease control systems in developing countries are likely to cause spikes in coronavirus cases that might impact the globe, experts say

By Cao Ran

On April 7, the government of Zanzibar, a semi-autonomous region in Tanzania, designated five schools as temporary quarantines. Zanzibar had seven confirmed cases of Covid-19, mostly imported from Europe. Local health officials told *ChinaReport* that all the cases were mild and patients were in hospital receiving treatment.

The World Health Organisation (WHO) warned of the Covid-19 spread in Africa, particularly in Tanzania, Kenya and South Africa. As of April 6, African countries had 9,457 confirmed cases and 442 deaths. South Africa and Egypt, which boast the best public health systems in Africa, have the most confirmed cases.

Many developing countries in other parts of the world are also under growing pressure from the epidemic. By April 6, Brazil had 11,281 confirmed cases. India reported over 4,000.

According to John Nkengasong, head of the Africa Centres for Disease Control and Prevention, if cases escape detection, the poverty, social instability and weak healthcare systems in some countries could exacerbate the pandemic and potentially have a global impact.

Zhang Wenhong, director of the Department of Infectious Diseases under Huashan Hospital affiliated with Fudan University, called for the world to unite and help countries with inadequate medical resources to combat the disease. "The success of the battle hinges on countries with the poorest public health systems, rather than the opposite," he said.

Mission Impossible

In Zanzibar, whenever authorities find a suspected case, medical institutions will take samples and send them to Dar-es-Salaam, capital of Tanzania. It usually takes three days to get the test results. Sara Nieuwoudt, a lecturer at the School of Public Health, University of Witwatersrand in South Africa, said there are vast differences in health systems on the African continent.

"Countries that have centralised systems to coordinate responses and strong supply chains will do better to prepare for any significant increases and rolling out interventions such as testing," she told *ChinaReport*. "Countries like South Africa, which have existing surveillance and testing infrastructures, will adapt more quickly than more poorly resourced counterparts in the region."

When Covid-19 first appeared in Africa in February, only the Institute Pasteur in Senegal and the National Institute for Communicable Diseases in South Africa were equipped to detect cases. Even though over 30 African countries could detect the virus by April, most laboratories are in capitals and major cities, making widespread detection efforts difficult.

The WHO requires that all countries report new contagious diseases immediately. When H1N1 struck in 2009, Benjamin Cowling, a professor at the School of Public Health at Hong Kong University, argued that it was nearly impossible for developing countries with ill-equipped laboratories to report data to the WHO.

"China was not counting the asymptomatic infections either [early in the outbreak]. With limitations on testing capacity, priority should go to symptomatic persons. If there is enough capacity, we can also consider testing asymptomatic persons," he said.

During a press conference at WHO headquarters in Geneva in February, a representative of Sudan said: "We are fighting six epidemics now. We don't need another one." Sara Nieuwoudt told our reporter that health systems in South Africa were already "under a huge strain before the coronavirus."

Since February 2020, most "patient zero" cases in Africa came from Europe. Starting from March, most governments in Africa vowed to control imported cases from Asia and Europe. Instead of air and sea travel, many developing countries in Asia, Africa and Latin America see larger travel volumes on their roads and rivers, which pose an even greater challenge to monitoring population flows.

Because it is difficult to assess accurately the epidemic in developing countries, Cowling said the international community must establish a monitoring protocol based on symptoms and systematic virological testing rather than just monitoring confirmed cases.

Double-edged Sword

Since April, the Dharavi slum in Mumbai, India has been unusually still. Military police officers blocked the entrance and epidemic prevention personnel disinfect the empty streets regularly. As of April 7, there were three confirmed cases, including two deaths.

In many developing countries, slums and poor communities have large population concentrations with weak health infrastructure. Some even lack clean water. In others, authorities struggle to push basic practices such as frequent hand washing. Also, malnutrition is common in these areas, which further increases risk of disease.

Nineteen countries reported more than 100 deaths between March 29 and April 5. The increase is leaving many developing countries in limbo, particularly those with weak public health systems. In India, there are only 1.31 beds per 1,000 people, far below many developed countries.

Conditions are even worse in some African nations. A Chinese doctor who has served on medical missions to Africa told *ChinaReport* that Zanzibar has no ICUs, ventilators and negative pressure isolation rooms. Its largest hospital is smaller than most county hospitals in China. "We brought all our medical supplies from China when we worked in Zanzibar," he said.

Public health spending per capita in most African countries is less than US$20 each year, far below the US$34-40 set by the WHO. African medical workers account for 1.3 percent of the world total, but they handle 25 percent of disease treatment globally. On the

PHOTO BY VCG

People maintain social distancing while lining up outside a bank in Srinagar, capital of India-controlled Kashmir, April 6, 2020

continent, 13 countries met the WHO's minimum standards – one hospital per 100,000 people.

Since the global spread, community-centred isolation has been the only anti-epidemic method available to many developing countries. On March 24, India declared a 21-day "complete lockdown" to stop the coronavirus which was extended to May 3. Meanwhile, many countries in Africa announced a state of emergency: 53 countries closed schools and cancelled public activities and 43 countries closed their borders.

Sara Nieuwoudt said public trust in the health system is critically important and wealth does not automatically translate to effective responses if key influencers, such as religious leaders, are not part of the response.

"We have seen this in countries like Nigeria, where religious leaders have actively worked against polio vaccination campaigns. The same could happen with coronavirus responses unless such individuals are involved in promoting public health," she said.

In countries with inadequate medical resources, lockdowns are double-edged swords. Lagos, the biggest city in Nigeria with a population of 20 million, has strictly controlled transportation and population flows since the outbreak of Ebola, successfully preventing its spread. In some cities far from the capital, however, isolation measures have resulted in rapid depletion of medical resources and growing death tolls.

A United Nations report in 2015 stated that during the latter periods of Ebola, lockdown measures in some western African countries resulted in high school dropout rates, pregnancy and maltreatment. The Tanzania government recently announced that if it implemented a complete lockdown, many would starve to death.

Epidemic Victims

"The only way out for these countries is support from the international community," said Chee Yoke Ling, founder of the Covid-19 Clinical Research Coalition. In an article published in medical journal *The Lancet* on April 2, a newly established coalition of scientists, doctors, funders and policymakers from 30 countries wrote that to help developing countries combat the disease, it is urgent to construct a global cooperation framework, strengthen medical training for lagging countries, and build a supply chain of medicines and vaccines based on equality and mutual assistance.

China's SARS outbreak in 2003 prompted the WHO to create the International Health Regulations in 2007. The World Trade Organisation (WTO) created an international cooperation mechanism to coordinate and share reports of any contagious diseases from member countries.

During the H1N1 outbreak in 2009, the cooperation framework showed many weaknesses. In the article "Pandemic Preparedness and Response – Lessons from the H1N1 Influenza of 2009" published in the *New England Journal of Medicine*, author Harvey V. Fineberg summarises that the world is ill-prepared to respond to a severe influenza pandemic or any similar sustained public health emergency.

But unlike the WTO, the WHO does not have the power to sanction countries that break the International Health Regulations. When an epidemic occurs, each government combats the disease however they see fit.

Fineberg added that the contagious disease prevention system is only effective to handle regional emergencies, not a global pandemic.

Chee Yoke Ling told our reporter that the recent coronavirus outbreak has depleted global medical supplies. Many countries ignored the appeals of the WTO and continued to issue export restraints and prohibitions. The poorest countries have become the biggest victims.

"This makes us very, very concerned that when it comes to medicines and vaccines, instead of international cooperation and solidarity, we will see more grabbing and self-interest. The ugly face of inequality at the global level is starkly exposed by the pandemic," she said.

As of April 7, more than 70 countries and 20 medical R&D institutions have taken part in the Global Solidarity Project to ramp up clinical research on Covid-19 and share treatment and vaccine research. Meanwhile, some pharmaceutical companies have franchised their production of new medicines.

"We need to systematically increase production along the entire supply chain, and while this is really challenging with lockdowns everywhere," Chee said. ★

Covid-19

CRITICAL LACK OF CARE

Wuhan's higher rate of Covid-19 deaths can be attributed to uneven medical resource distribution, lack of infectious disease and ICU departments, and an ineffective hierarchical medical system

By Du Wei, Li Mingzi, Liu Yuanhang and Jiang Xue

If you take Subway Line 2 in Wuhan, Hubei Province, you will pass at least 10 top-tier hospitals and their branches, many of which served as the core force against Covid-19 which battered the city in the early months of 2020.

Long considered to have a high standard of medical care among central regions of China, Wuhan has 27 top-tier hospitals, ranking fifth on the Chinese mainland after Beijing, Shanghai, Chongqing, and Guangzhou, capital of Guangdong Province. Patients come from surrounding regions as well as across Hubei Province to consult the city's healthcare professionals.

So few people expected that Wuhan's medical system would be overwhelmed so quickly by the Covid-19 outbreak that it would drive many medical workers to make fraught online appeals for help. Now the epidemic is largely under control in the province, a feat achieved

Photo by Li Mingzi

Due to the high numbers of Covid-19 patients admitted to hospitals in Wuhan, each doctor was responsible for three ICU patients

due to assistance from other parts of the country, it is time for Wuhan to reassess and fix its medical system.

Useless Expansion

According to the 2018 Chinese Hospital Ranking released by Shanghai-based Fudan University, Wuhan has three hospitals in the top 50. The first two, Tongji Hospital and Wuhan Union Hospital, both under Huazhong University of Science and Technology, have 4,000-5,000 beds each.

A professor at Huazhong University's Tongji Medical College, who refused to reveal his name, told *ChinaReport* that Wuhan's top-tier hospitals pushed to expand and the number of beds contributed much to the city's reputation of having abundant medical resources. By 2018, Wuhan had on average 8.6 beds per 1,000 people, much higher than the State's average level (six beds) and that of Beijing and Shanghai (5.74 beds).

In 2015, China's State Council issued a document forbidding public hospitals from increasing the number of beds for no good reason. But in Wuhan, the top hospitals dodged the ban by establishing branch hospitals instead.

This expansion in physical resources was not backed by a similar increase in human resources, according to Liu Zhiyong, another professor at Tongji Medical College. In 2018, Wuhan had 3.57 doctors and 4.91 nurses per 1,000 people, while in Beijing, there were 5.1 doctors and 5.7 nurses per 1,000 people. It indicates, Liu said, that Wuhan's medical workers had heavier workloads.

As health authorities are inclined to distribute resources to top hospitals, their expansion curbed the development of hospitals lower down the pecking order. Ruan Xiaoming, a former official at the Hubei provincial healthcare bureau and former deputy director of the Hubei Province Hospital Association, told *ChinaReport* that second-tier hospitals in Wuhan were in a Catch-22. To get more resources, they had to either climb the rankings or risk being downgraded to district hospital level whose budget is covered by the local government.

At the beginning of the Covid-19 outbreak, Wuhan requisitioned seven municipal second-tier hospitals, only to find they were incapable of battling a disease which was much more infectious than SARS.

Little Experience

The biggest issue, Ruan said, was that most hospitals had little experience in dealing with infectious diseases.

According to Zheng Xian'nian, director of the emergency department at the municipal Fifth Hospital of Wuhan, his hospital did not set up a fever clinic until January 22 and before that, all patients with Covid-19 symptoms went to the emergency room.

"The number of patients admitted to our emergency department surged in early January and exceeded 400 per day by mid-January, more than three times the usual," he told *ChinaReport.*

Zheng said the infectious disease department at his hospital only had three doctors, 10 less than the emergency department. To respond to the Covid-19 epidemic, the Fifth Hospital was transformed into an infectious disease hospital, with its whole medical staff, around 1,000 people, deployed to treat Covid-19 patients after rapid training.

Respiratory departments were the next line of defense. Zhang Jixian, a respiratory and ICU physician at the Hubei Provincial Hospital of Integrated Traditional Chinese and Western Medicine, was the first doctor to officially report cases of the novel coronavirus. He told *ChinaReport* that his respiratory department treated 230 patients in the week following the New Year holiday (January 1-3).

"As the infectious disease department had neither people nor space, patients were transferred to the respiratory and gastroenterology wards, the former for fever patients whose numbers always peak in winter, and the latter for intestinal diseases that are more communicable in summer," he said.

Gong Zuojiong, director of the infectious disease department at the Renmin Hospital of Wuhan University, told *ChinaReport* that most municipal hospitals in Wuhan have no infectious disease department.

Guo Wei, deputy director of the infectious disease department at Tongji Hospital, also told *ChinaReport* that in many municipal hospitals, the infectious disease department and emergency department are joined and share the same senior staff, with the fever and intestinal clinics, if any, performing practically no function.

"There's a saying among infectious disease doctors – 'the infectious disease department is like a bedpan – no one takes it out until they need it,'" he said.

No Isolation Wards

The lack of isolation wards, which were vital to prevent infection, was an even bigger problem. Zhang Wuchang, vice president of the Fifth Hospital, told *ChinaReport* that although they started creating temporary isolation wards on January 8, they found the demand was so great that they had to use the resuscitation room and the observation room, and even put 10 beds in the lobby of the emergency department which were filled within five minutes.

As a provincial hospital, the Renmin Hospital of Wuhan University where Gong works had isolation wards before the epidemic, but they did not have negative pressure chambers, where air pressure is lower than outside, to prevent cross-infection. "We dealt with few respiratory diseases," Gong said, revealing that the infectious disease department in his hospital focused on intestinal diseases which are not communicable via aerosol droplets and thus have lower requirements for isolation conditions.

Ruan told *ChinaReport* that most municipal-run hospitals in Wuhan did not set up an infectious disease department because they could transfer patients to Wuhan Jinyintan Hospital, the only provincial medical emergency centre in Wuhan. Built following the 2003 SARS epidemic, Jinyintan was responsible for patients suffering from more common infectious diseases, such as tuberculosis, AIDS and avian flu. According to Ruan, it provided around 700 beds by the time it was put into use in 2008, a size similar to those built for the SARS epidemic.

Yet Guo argued that one infectious hospital like Jinyintan might be fine for when there is no epidemic, but it is definitely not enough to handle the situation when a new infectious disease breaks out and spreads quickly. He suggested each hospital set up a number of negative-pressure isolation wards.

"An infectious disease department will not play any role until it is equipped with enough [isolation] wards," he said.

Weak ICU Provision

Despite the big number of top hospitals and beds, Wuhan's medical system was weak in ICU care. According to the 2018 Specialised Hospital Ranking published by Fudan University, none of the ICUs in Wuhan were listed in the Top 10 nationwide.

"The ICUs in Wuhan differ sharply between hospitals, and their general quality cannot rival those in big cities like Beijing, Shanghai and Guangzhou," Li Jianguo, a chief expert at the ICU department, Zhongnan Hospital of Wuhan University and a former senior member of the China Society of Critical Care Medicine (CSCCM) Hubei Branch, told *ChinaReport*.

At a press conference held by China's National Health Commission on February 4, health official Jiao Yahui ascribed Wuhan's higher rate of Covid-19 deaths to the lack of ICU beds, only 110 at the preliminary phase of the outbreak. He said that the rest of the inpatients were taken care of by non-ICU medical workers which crippled Wuhan's medical care service. On April 17, Chinese health authorities revised upward the death toll for Covid-19 cases in Wuhan from 2,579 to 3,869, a 50 percent increase.

Medical workers dress in personal protective equipment before starting their shift at an ICU

At Wuhan Jinyintan Hospital for example, its ICU department only had five doctors with less than 20 instruments for oxygen treatment. The hospital transformed three floors into ICUs and sought assistance from three other top hospitals.

"We found there was a massive lack of medical staff, especially ICU doctors and nurses," said Tong Zhaohui, deputy president of Beijing Chaoyang Hospital who was part of the first specialist team to go to Wuhan from Beijing.

"We later asked five hospitals in Beijing, Shanghai and Guangzhou to send a number of experienced ICU doctors to assist... And by Spring Festival Eve (January 24), Jinyintan's ICU department only had two doctors left, with the other three all on sick leave," he added.

Li Shusheng, the ICU director at Tongji Hospital, blamed a shortage of young specialists for Wuhan's weak ICU care. He told *ChinaReport* that medical graduates in China cannot become a specialised physician until they complete a State-defined resident training for the target department. ICU care, however, is not listed as part of the State training programme. This means ICUs have to attract doctors from other departments who might feel reluctant to spend additional time on ICU training with little return.

"Intensive care is the only Class-2 subject in clinical medicine that isn't covered in the State's training programme for residents, which is the first step to train young specialists," he said.

His opinion was shared by another expert who has been working in an ICU department for over 20 years. "How could a department not be in chaos if it has no [talent] base. It can't be a permanent plan that we have to depend on nationwide assistance under State orders to bat-

Photo by Li Mingzi

Photo by Ke Hao

A doctor from Beijing looks at a patient's CT scan in an ICU at Wuhan Tongji Hospital, February 2, 2020

tle a big epidemic," he told *ChinaReport* on condition of anonymity.

Ineffective Hierarchical System

Wuhan's hospitals were overburdened in the preliminary phase of the epidemic as people flooded into hospitals following the lockdown. Data from the Wuhan Municipal Health Commission showed that fever clinics in Wuhan recorded 75,221 patients from January 22 to 27, only 3,883 of whom stayed for further medical observation.

To prevent cross-infection in hospitals, the municipal government quickly established a hierarchical system, defining district hospitals as the first site for people to check if they were infected with Covid-19, and no upper-tier hospital would admit any Covid-19 patient without a transfer letter from a district hospital. Yet, as district hospitals were not skilled at distinguishing and treating infectious diseases, the system caused many patients to be left unchecked and untreated at home. The situation did not turn around until teams of medical workers and experts were sent to Wuhan.

"We saw 200 fever patients per day at the peak (January 25 to February 14), since our hospital was the only one in the neighbourhood that was able to admit fever patients and do CT tests," an insider at the district-level Wuhan Chang Dong Hospital told *ChinaReport*.

Wuhan started a dual-transfer system in 2006 which encouraged big hospitals to transfer patients with chronic or common diseases to district hospitals and district hospitals to transfer patients with rare and serious diseases to big hospitals. In 2008, big hospitals began to connect to district hospitals for the convenience of the transfer, and in 2015 and 2016, Wuhan issued two documents promoting and improving the hierarchical system.

But the system did not work as well as expected. According to Xiong Nian, president of Wuhan Red Cross Hospital, district hospitals actually focused on public health services, such as vaccination, instead of medical diagnosis and treatment. He revealed that among 12 district hospitals in Hankou District, at least half did not even set up a ward, and among the remaining ones with wards, half used the wards as nursing homes for senior citizens.

"Compared to upper-tier hospitals, district hospitals lag behind in the quality of treatment and even the varieties of medicines," Xiong told *ChinaReport*. "Supposing my hospital provides 1,000 kinds of medication, the number of those available in a district hospital will not exceed 100," he added.

In Xiong's opinion, the hierarchical system just served to "pump" patients from district hospitals to big ones. "When providing medical services at a [connected] district hospital, doctors from a municipal hospital would transfer all the patients to their hospitals... The district hospital's 3 million yuan (US$426,372) social medical insurance quota would be counted in the municipal hospital's account," he said.

"The connection between big hospitals and district hospitals is too loose. It should have been a win-win model where doctors from big hospitals bring technologies to district hospitals and help improve the skills of the grass-roots medical workers," said Ruan Xiaoming.

Wang Guiqiang, a chief member of the China Society of Infectious Disease, observed that Singapore's 800 district clinics played a big role in preventing hospitals from becoming overwhelmed during the pandemic.

He suggested that China train more general practitioners for district hospitals and put the fever clinic system established following the SARS epidemic under the charge of those district GP physicians.

"District hospitals should focus more on doing preliminary tests for common diseases and take over the fever clinics from second-tier hospitals, so the second-tier ones can take charge of common infectious diseases. Top-tier hospitals will be for rare and incurable diseases. This is the [right] hierarchical system for the future," he said. ★

PHOTO BY XINHUA

A cleaner changes a medical waste bag in Huoshenshan Hospital in Wuhan, March 20, 2020

MEDICAL WASTE MOUNTAIN

Health authorities are working to address China's inadequate medical waste disposal capacity following the outbreak of the novel coronavirus

By Yang Zhijie

Before the coronavirus outbreak, Wuhan, a city of 11 million residents, produced about 40 tons of medical waste a day. "But, alongside the drastic spike in confirmed and suspected Covid-19 cases in the city, over 240 tons of medical waste were generated a day at its peak," said Zhao Qunying, director of the emergency management office of the Ministry of Ecology and Environment (MEE) during a press conference on March 11.

Dealing with the masses of medical waste produced across the country has become a problem that threatens public health, particularly if disposal is poorly managed.

According to the National Hazardous Waste Catalogue released in 2016, medical waste tops the hazardous scrap list because it carries infection loads usually dozens or even thousands of times more than household rubbish.

In addition to Wuhan, the early epicentre of the pandemic, the ability of cities in China to cope with the enormous amounts of medical waste generated every day since the start of the coronavirus pandemic has caused alarm, with authorities rushing to build new systems and facilities for waste disposal to prevent further spread of the virus and secondary infections.

At Capacity

According to incomplete statistics from news portal *The Paper*, Wuhan, capital of Hubei Province, had provided at least 37,000 beds at designated hospitals, field hospitals and school dormitories for Covid-19 patients. During the worst period of the epidemic, one inpatient on average produced 8 to 10 kilograms of medical scrap each day at Huoshenshan Hospital, the field hospital that was built in 10 days in Wuhan to cope with bed shortages.

Medical waste piled up at hospitals because of the limited handling capacity. On February 14, Wuhan Youfu Hospital became a designated hospital to treat coronavirus patients with an addition of 900 beds. "Our hospital was even short of waste containers to transport medical waste. We wrote many applications and contacted waste disposal companies every day, but we were told that there were no vehicles available," a worker at the hospital's infection department told our reporter on condition of anonymity.

Wuhan's hospitals had to seek help from other cities. Sun Yu, associate director of the enterprise management department of Hubei Zhongyou Youyi Environment Protection Company, said that after Wuhan went into lockdown, her company did its best to help transfer medical waste after consultations with local environment agencies.

"A container for medical waste usually weighs 30 to 40 kilograms. After the epidemic outbreak, syringes and needles, face masks, and household rubbish including clothes, bedding and vomit were categorised as medical waste," she told *ChinaReport*. "Sometimes, a container would be filled just with a few protection suits."

The company sent 85 staff and 35 vehicles to Wuhan, including 10 vehicles with a load capability of 14 tons which travelled between hospitals and waste disposal sites. During the peak period, daily waste from one hospital could easily fill a vehicle.

The hours were long. "A vehicle sometimes had to travel between hospitals and waste disposal sites three to four times a day," Sun said, adding that workers had to work at hospitals until 9pm each day. Vehicles carrying waste then would head back to the company after transporting the waste to disposal sites.

Disposal Plight

TUS-EST, an environmental enterprise headquartered in Beijing, responded to appeals from hospitals in Wuhan. On February 11, 12 workers from the company and medical waste disposal facilities arrived in Wuhan, providing specific assistance to Union Jiangnan Hospital. "The volume of medical waste is five to six times more than normal – around 80 containers were produced in the hospital each day," said Zhao Yanni, who led the team from TUS-EST in Wuhan.

Zhao Yanni said many links concerning medical waste disposal during the emergency are problematic. Medical waste is likely to be contagious and toxic, which needs special treatment. Medical institutions have to sort and store waste before third-party organisations take them to disposal centres.

According to Chinese regulations on clinical waste, special containers and packaging are needed for different kinds of waste. After the epidemic outbreak in Wuhan, all local hospitals were short of staff and supplies, and it was difficult for doctors and cleaners to cope with the waste properly.

Zhao Yanni saw that hospitals just used bedsheets to wrap items that had been used by patients. "These non-standard processes put transportation and disposal staff at great risk," she said. The shortage of cleaning staff became so great, that hospitals were willing to offer high salaries. In early February, Huoshenshan Hospital hired cleaners for 20,000 yuan (US$2,820) a month.

Medical waste also piled up at Wuhan's treatment centres. Wuhan Hanshi Environmental Engineering Company was the only company capable of shipping and processing medical waste in the city. In 2018, it had a daily capacity of around 49 tons.

Wuhan built 17 temporary medical waste storage sites with a capacity of 1,118 tons. "It was really difficult in late February and early March. They couldn't process such huge amounts of medical waste," said Sun Shaofeng, deputy director of the supervision office of solid waste division at the MEE.

To speed up the disposal of medical waste, the MEE has deployed emergency measures such as building centralised disposal plants and deploying mobile incineration stations and on-site incineration facilities for hospitals. Some waste disposal plants were converted to deal with medical waste.

Wuhan Beihu Yunfeng Environmental Technology Company specialises in the treatment of industrial hazardous waste. On January 21, the firm started dealing with medical waste. In late February, Wuhan began to handle ordinary medical waste at household rubbish incineration centres, increasing the city's medical waste disposal capacity.

Sun Shaofeng told our reporter that by March 2, all the stored medical waste had been safely processed in Wuhan. On March 21, the city's medical waste treatment capacity rose to 265 tons per day. Since early March, medical waste volume in the city averaged 200 tons a day, and it was able to be processed within 24 hours.

Secondary Pollution

"It's vital to disinfect medical waste," Zhao Yanni said. TUS-EST's team worked in a 50-square-metre area at Union Jiangnan Hospital. As soon as a medical waste container arrived, it was disinfected twice. Every three hours, workers disinfected containers and walls.

TUS-EST's emergency waste disposal equipment uses steam to disinfect waste at a temperature of 135 C for 45 minutes. The majority of the waste is then incinerated at a temperature of 850 C, before solidification and landfill.

According to Hu Hualong, deputy director of the solid waste and

Photo by Chen Liang

A medical waste processor sterilises containers of medical waste at a rubbish treatment centre in Qingshan District, Wuhan, March 24

chemical management centre of the MEE, 70 percent of medical waste is incinerated in China. The rest is dealt with by high-temperature steam, chemical disinfection and microwave disinfection.

"Both incineration and high-temperature steam can help disinfect medical waste. Incineration is the most effective way to reduce the amount of waste. After steam sterilisation, you have to incinerate and then put it in a landfill," Zhao Yanni said.

He Pinjing, director of the Key Laboratory of Solid Waste Treatment and Resource Recycling under Tongji University in Shanghai, said that China's medical waste disposal system has never had to deal with such a large amount of protective suits, goggles and face masks.

"Medical waste has different textures and burning patterns. The components of smoke and steam that may lead to secondary pollution are also different," he said. "It needs long-term research and data accumulation."

Sun Ning, head of the Environmental Engineering Department of the Environmental Planning Institute of the MEE, said that the epidemic exposed many problems in the systems and technology to treat medical waste. There was a scramble to implement medical waste emergency measures, and severe shortages of waste transportation vehicles and containers as well as on-site disposal staff.

Public Health

According to the MEE, 50 cities across the country have reached or virtually reached their medical waste disposal capacity. "The epidemic taught us that medical waste disposal is the last line of defense for the urban public health emergency system," Sun Ning said. "If that line is broken, it will likely result in secondary pollution."

Du Huanzheng, director of the Circular Economy Research Institute of Tongji University, argued that the weak systems for emergency medical waste disposal in many cities reflect problems in management rather than in technology.

"Many local governments and medical institutions failed to pay enough attention to emergency response capability," he said. "Some policymakers are aware of the need for emergency responses, but they only allocated funds to medical waste treatment instead of emergency response capability."

After the SARS outbreak in 2003, the State Council ordered cities to build centralised medical waste disposal facilities. On November 2, 2017, the National Health Commission (NHC) announced that one-fifth of Chinese cities did not have centralised medical waste treatment centres. Du Huanzheng told our reporter that medical waste treatment in China has long suffered from a shortage of investment because of high costs and low profits.

In March, the NHC and 10 other government agencies released a directive demanding that by the end of 2020, each prefecture-level city must have a central medical waste treatment site. By the end of June, each county has to build a medical waste transit system.

Daily medical waste disposal capacity in all 358 cities across the country rose from 4,902 tons on January 20 to 6,022 tons on March 7, according to Zhao Qunying, director of MEE's emergency management office.

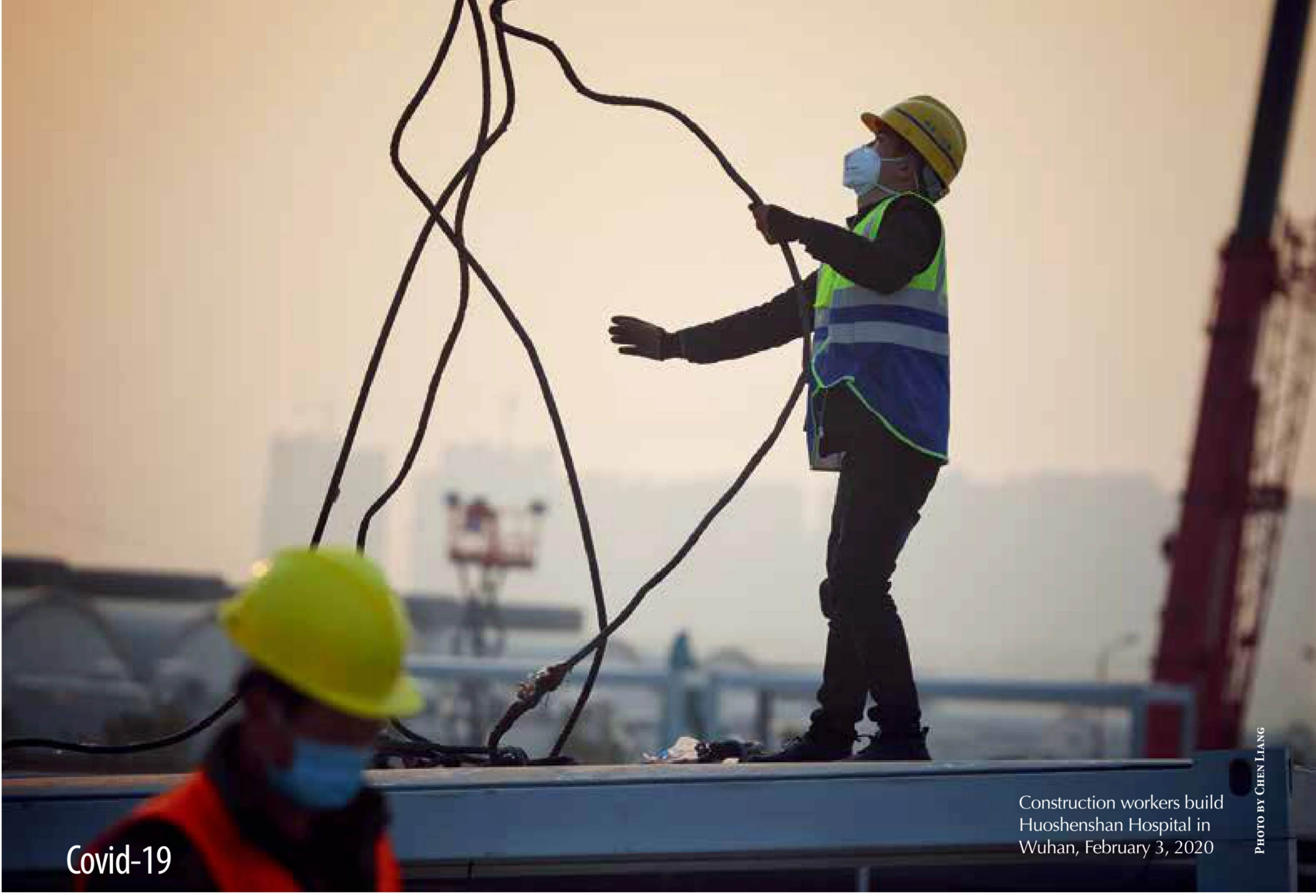
"Urban sewage and household rubbish disposal facilities have been incorporated into urban infrastructure planning. Although part of the hazardous waste chain, medical waste has yet to be added to the plan," said Zhang Yi, chairman of China's Strategic Emerging Industry Environmental Protection Union.

He Pinjing told our reporter that it is not reasonable to just build as many medical waste disposal plants as possible. A good solution is to allow ordinary rubbish disposal systems to tackle medical waste during emergencies, He said.

In February 2014, Shanghai for the first time used its household rubbish disposal system to process medical waste. In 2019, close to 1.45 trillion tons of medical waste was processed at household rubbish plants.

He said that it is necessary to roll out support policies, regulations and technological standards, and prepare proper facilities with staff trained in practices and procedures to convert rubbish disposal plants into medical waste disposal centres.

"A disposal facility for urban household rubbish and clinical waste is like a toilet for a city," he said. "They are also a core infrastructure asset." ★



Construction workers build Huoshenshan Hospital in Wuhan, February 3, 2020

PHOTO BY CHEN LIANG

Covid-19

WORKING ON RETURNING TO WORK

As the outbreak heavily impacted the economy, local governments must strike the delicate balance of reactivating production with efforts to prevent a possible resurgence of Covid-19

By He Bing

A 50-container train headed for Duisburg, Germany left Wuhan on March 28. According to media reports, 90 percent of the cargo came from local businesses, an indication that the epicentre of China's Covid-19 outbreak has resumed production after months of lockdown.

Authorities announced on March 11 that the provincial government could allow local enterprises to resume production in batches after receiving approval, with those engaged in key industries given top priority. The Hubei provincial government has reopened some passenger air and rail services since late March and plans to resume all domestic travel to and from Hubei by April 8.

Concerned over a resurgence of the virus – there are still more than 1,000 people receiving treatment for Covid-19 in Wuhan and the virus is spreading across Europe and the US – the government did not give a specific reopening date for all local enterprises.

But experts warned that the prolonged lockdown has hurt the economies of Wuhan and Hubei and would continue to affect operations in the long term.

"It's evident that the economy has been heavily impacted in the first quarter," an official at Wuhan Municipal Development and Reform Commission who refused to reveal his name told *ChinaReport*. "Many Q1 indices have fallen to 'zero' ... It will be a huge challenge for the [municipal] government to pull local businesses out of their difficulties and help the economy recover," he added.

Economic Impact

According to Xu Hongcai, deputy minister of China's Ministry of Finance (MoF), revenues for Hubei dropped sharply in February and are predicted to see little recovery for March. Wuhan's economy sustained even more damage.

At the same time, epidemic control efforts sent expenditures skyrocketing. According to *China Financial and Economic News*, a publication under the MoF, the municipal government of Wuhan had injected 7.1 billion yuan (US$1.1b) into epidemic controls as of March 11 to cover hospital renovation, medical treatment and quarantine efforts. In addition, the modular Huoshenshan and Leishenshan hospitals built for critical Covid-19 cases and 16 makeshift hospitals in sports arenas also strained the city's coffers.

Business shared the same fate. With most Wuhan residents quarantined at home, offline consumption plunged. Forced to pay rent for closed shopfronts and employee wages despite no revenue, many businesses are teetering on the verge of bankruptcy.

"He pays 10 million yuan (US$1.5m) in rent and 50 million yuan (US$7.4m) in wages each month," Luo Zhi, the director of the Institute of New Private Economy under Wuhan University, said of the owner of a chain of foot massage parlours. "The two-month lockdown has caused him losses of more than 100 million yuan (US$14.7m) ... He plans to give up," said Luo, whose team has been studying the epidemic's economic impact on Wuhan.

The effects will be even deeper and longer in upstream manufacturing, a pillar industry for Hubei.

"As more and more enterprises outside Hubei have already resumed production while those in Hubei are still in lockdown, the market will be re-divided," she said. "Factory orders are generally placed once a year. If an enterprise misses this year's window, it may lose its market position the next year," she added.

Given 70 percent of Hubei's industrial chain is located within the province, Luo worried that the bankruptcy of one enterprise would have a devastating ripple effect.

While some larger businesses may survive, the sharp drop in sales would influence hundreds of small- and medium-sized enterprises that depend on them. This could lead to a vicious cycle: bankruptcies would increase unemployment and further reduce consumption, bringing down demand and causing more enterprises to go bankrupt.

Based on their surveys, Luo's team submitted three reports to both the municipal and provincial governments in early March. "Wuhan must shift parts of its focus on the economy. The government must put resuming production back on the agenda before it is too late," warned one of the reports.

Partially Resumed

Hubei began preparing for its return to economic normalcy in late February with the launch of a "health code" app. The phone app issues residents with a green, yellow or red QR code that when scanned at checkpoints shows their status as "pass," "under quarantine" or "under medical treatment" based on personal information.

But the health code was not launched until March 6. The same day, Hubei saw its daily number of new Covid-19 cases drop below 100.

On March 9, the day before cities in Hubei except Wuhan were slated to resume production, the provincial government demanded that each city and district carry out different controls based on a State-issued guidebook that defined levels of Covid-19 risk.

However, when *ChinaReport* called Hubei government officials to verify two documents circulating online that read two auto manufacturers were approved to resume production, the official claimed to have no knowledge of them.

The situation was not made clear until March 10 when Chinese President Xi Jinping visited Wuhan and called for "differentiated" and "conditional" resumption measures.

On March 11, Hubei's new confirmed cases dropped below 10. The provincial government released a statement on its website saying it would resume production selectively. Essential businesses such as public transport, agriculture and important links in the global industrial chain would have priority, the announcement read.

"We were approved five days after submitting an application," a head of a telecommunications company told *ChinaReport* on condition of anonymity. Approval to resume production is handled at the district level by command centres for epidemic control and prevention.

"We showed the command centre our stock [of protective gear] and could guarantee we would carry out prevention controls during production," he said, adding the company also provided employees with single dormitory rooms and meals to help with quarantine measures.

But these high safety requirements have not only raised costs for factories, but also have made employees reluctant to return.

The telecom head said that only 20 percent of employees had come back to work on their first day of operation, but running at reduced capacity was better than nothing. What concerns him even more are logistics. Since transportation lines to Wuhan have not reopened completely, it takes longer to ship supplies. This will hinder production even more, despite having workers ready to go.

"Our stock of materials is really only enough for two weeks of production," he told *ChinaReport*.

Ye Xueping, director of the Institute of Economics, Hubei Academy of Social Sciences, told *ChinaReport* that manufacturing and service industries which depend heavily on labour and logistics would not resume production completely until the lockdowns on Hubei and Wuhan were fully lifted.

Striking a Balance

ChinaReport found that Hubei still requires most government employees, including some at State-owned enterprises (SOEs), to supervise epidemic control efforts at the district and community level.

Data from Wuhan showed that by February 28, more than 80,000 officials had been dispatched to cooperate with cities, communities and government-backed organisations to screen and investigate suspected Covid-19 cases.

"Dispatching officials to communities indeed played a role in epidemic controls in the preliminary phase, but the government should now shift to more scientific and targeted control efforts," Zhang Yansheng, a chief researcher at the China Centre for International Economic Exchanges, told *ChinaReport.*

What Wuhan needs most is to resume production in the short run and the central government's support in the long run

According to Zhang, as there are few new Covid-19 cases in Hubei, control should be handed over to specialists. If information remains transparent and residents remain vigilant, most officials, Zhang said, could shift their focus to economic recovery.

Fighting the epidemic is still the priority. If there were a resurgence after resuming work, officials would be held responsible and punished, which might dissuade them from doing so, he said. "It is urgent that leading officials find a balance between scientific epidemic controls and orderly production resumption," he added.

Luo Zhi favours a selective policy over a hard return date.

"It's better that we first warm up economic operations and then dynamically adjust policies according to the situation," she said.

To encourage more enterprises to resume production, Luo suggested including companies equipped with employee dormitories and dining halls, as well as those with high automation and do not require intensive labour. As for the remaining enterprises, Luo said the government should work out an inspection process and allow those qualified to restart production.

"Even though some enterprises could not afford to build dormitories and dining halls, they could rent hotels or order takeout... there are always more solutions than difficulties," she said. "What Wuhan needs most is to resume production in the short run and the central government's support in the long run."

Long-term Solutions

According to Luo, while the government enacted policies to aid strained enterprises, such as reducing taxes and social insurance payments, it did little good to ease their cash flow woes.

Some experts are appealing for the central government to give more financial support to Hubei. Wen Laicheng, a professor at the Central University of Finance and Economics, for example, suggested increasing loan quotas for Hubei Province and encouraged some departments to cooperate with Hubei and Wuhan on public works projects, much like the reconstruction efforts following the 2008 Wenchuan earthquake.

Zhang Yansheng also calls for more private investment. In 2020, Wuhan proposed 230 city-level projects, of which private investment is expected to make up 52 percent. Although private investment has taken a hit during the epidemic, Zhang said that Wuhan, home to high-tech development zone Optics Valley and a State-level lab for high-tech development, could take advantage of new infrastructure to absorb investment.

"Future infrastructure will focus on the new generation of information technology such as 5G," he said.

The government has taken measures. Chen Yixin, the deputy leader of the central government's epidemic control and prevention team sent to Wuhan who also served as Wuhan's Party secretary in 2017, held a meeting with the business community and former classmates in Hubei on February 22, encouraging them to protect Wuhan. Soon after the meeting, they started a programme to support medical workers, offering over 20,000 jobs to the children of frontline medical workers.

On March 12, Chen held a video conference with leaders of the business community from in and outside of Hubei, such as Chen Dongsheng, president of Taikang Insurance, Lei Jun, president of Xiaomi, Sun Hongbin, president of real estate developer SUNAC, and Mao Zhenhua, president of China Chengxin International Credit Rating. At the meeting, Chen called for more enterprises to join the campaign to protect Wuhan and encouraged local businesses to play a bigger role in Wuhan's development.

Although the epidemic has exposed weaknesses in Wuhan's social and public governance, Zhang believed that it has brought the city an opportunity to develop national-level scientific development projects and pilot new reforms, such as public sanitation.

"Because epidemic controls have reduced city coffers, it would be very difficult for Wuhan's government to recover economically on its own. Private investment and central government support are two leading solutions," Zhang said.★

LONG ROAD HOME

Outbound travel has officially resumed as new infections continue to decline. But once beyond its borders, many Hubei natives report facing more restrictive policies, fear and discrimination

By Feng Chao

Ran Shi thought he would simply return to his old life.

The Covid-19 lockdown had finally been lifted in the city of Jingzhou, Hubei Province, where Ran, a freelance photographer, had been stuck for nearly two months since returning to see family for the Chinese New Year holiday.

He quickly began the struggle to get all the documents to return to Shanghai, the city where he has worked for years.

Ran finally arrived on a cold and rainy March 21, and the reception at his residential community was just as chilly. A security guard stopped him at the gate, barring him from entering the compound.

"His manner changed drastically when he heard I was from Hubei. He was instantly hostile towards me," Ran told *ChinaReport*. Ran

Photo by CNS

Passengers line up to board the first trains out of Wuhan since the end of January. Wuhan started easing its lockdown on April 7, with 276 trains scheduled to depart the city's three main railway stations starting April 8

took out his smartphone to record his treatment, but the guard immediately snatched it from Ran's hand.

Other residents were there to witness the scene. Ran noticed they were muttering something back and forth to one another: "He came from Hubei."

Since mid-March, low-risk areas of Hubei have arranged transport for people to return to cities outside the province on direct, non-stop buses. On April 7, after 77 days of lockdown, Wuhan finally allowed outbound travel.

For many Hubei natives, the lifted lockdown did not end their woes. Many have since encountered difficulties, misunderstandings and discrimination in other regions of the country over the now prevalent stigma associated with Hubei – the epicentre of the Covid-19 pandemic.

Struggles to Return

Ran said he had foreseen not being able to return to Shanghai. He told our reporter that anyone from Hubei seeking to return to work outside the province must not only present health certificates but also a reception certificate from their neighbourhood committee in the destination city.

Ran said he suspected his experience outside his gate was a rare case, but a search online revealed many Hubei natives were having the same problems.

"Some neighbourhood committees will not issue the reception certificate at all. The policy does not work once we leave Hubei," Ran said.

Ran applied for a document in early March. But no matter how hard he pushed for one, the committee flatly refused. The photographer saw a glimmer of hope on March 15 after learning that workplaces could also issue reception certificates.

Hubei has reported zero or low numbers of daily new infections since March 18. On March 19, the government of Jingzhou, Ran's hometown, chartered non-stop "point-to-point" buses to send returning workers back to cities.

But according to reports, many buses departing from low-risk areas of Hubei such as Daye and Xiantao were barred from entering some cities and provinces. Many buses from Hubei were also stopped at toll gates outside Shanghai and told to turn back. Stuck in limbo, passengers were quarantined on the bus overnight.

Instead of taking a bus to Shanghai, Ran got on one to Yueyang, Hunan Province and then transferred to Shanghai. Expecting he would not be allowed to enter his flat and forced to self-isolate, Ran booked a flat through online housing platform Ziroom as back-up.

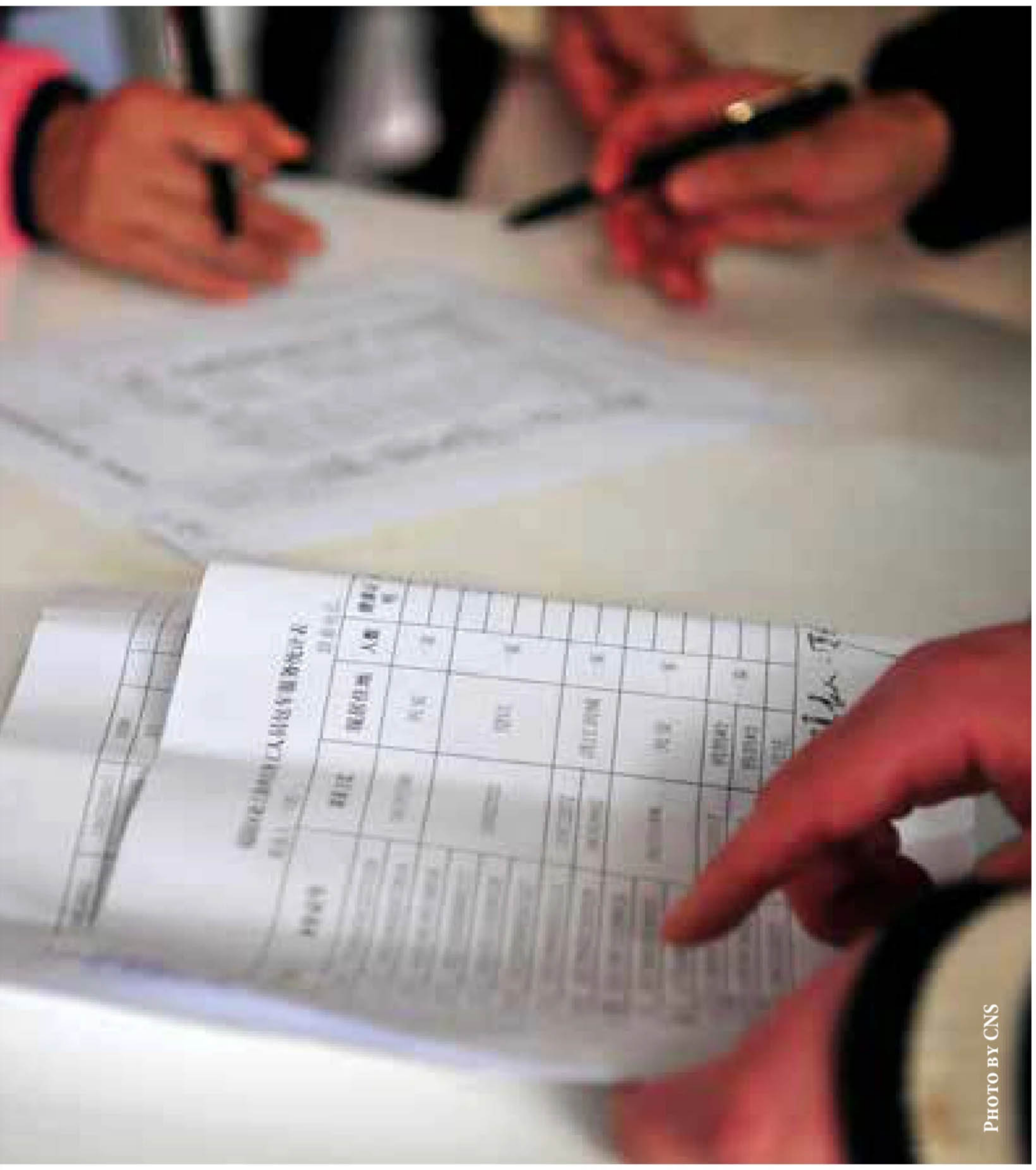
"The hostility from the community was beyond my imagination. I had already been quarantined for over 60 days and prepared all my health certificates, but was still stopped at the gate. I felt I had been discriminated against," Ran told *ChinaReport*.

Ran checked in to his small isolation room to find it had no heat, blanket or kettle. Ran had to wear four coats to keep warm, but still was too cold to sleep. Instead, he lay bundled up in bed and scrolled through the news on his phone. He kept finding stories of people from Hubei being turned away from their homes. "Everything I had experienced was so depressing," Ran said.

Still Stuck

Unlike Ran, Jiang Yan's family could not leave at all.

Jiang lives in Yingshan County of Huanggang, Hubei Province. In mid-January, her uncle, aunt and two cousins returned for Chinese New Year. And like the hundreds of thousands of Hubei natives who live out of province for work, they never expected a two-month lockdown.



Direct buses are arranged at the bus station in Yiling District, Yichang City of Hubei Province for workers heading to Shanghai and Shenzhen, March 17

A total of 431 workers from Hubei Province board a train from Wuhan to Guangzhou to resume work

As the first Huanggang county to see new infections drop to zero, authorities declared Yingshan a low-risk area and lifted the lockdown on March 13.

But not everyone was lucky enough to leave. Jiang's uncle and aunt worked in a State-run institution in Xinjiang Uyghur Autonomous Region, which had stricter rules in place. Unable to get return permits from their employers, the couple had no choice but to stay in Yingshan.

The couple's two daughters, Jiang's cousins who lived in Beijing, also could not leave. Though travel bans were lifted in low-risk areas of Hubei, Beijing was still not allowing people from Hubei to enter the city.

On March 21, Jiang's uncle and aunt finally received their permits from their employer in Xinjiang, and planned to take their two daughters with them. But the Centre for Disease Control (CDC) of Yingshan County rejected their younger daughter's application.

"The CDC found out that one of my cousins had initially come to Hubei from Beijing. They rejected her application for fear that she might just hop from Xinjiang to Beijing," Jiang told *ChinaReport*. Eventually, the local CDC required that the family sign a notarised statement promising they would not to go to Beijing.

After signing, the family began preparing for their 4,000-kilometre drive to Xinjiang, which included finding another person to ride share and split the driving.

But on March 23, Jiang's uncle and aunt's employer reneged and forbid them from returning. Despite all their efforts, the family was still stuck and disheartened. "The whole family has decided to stay in Yingshan for now and gave up on their plans to go to Xinjiang," Jiang told our reporter.

Ran didn't give up. While stuck in his cold flat, he called authorities to complain. On March 23, he was allowed to enter his flat. This time, the guard who had treated him so rudely before did not stop

Photo by CNS

Photo by IC

A take-out delivery man outside a shopping centre in Wuhan, March 30

him or even check his prepared certificates.

But he had only solved the first of many problems. Now Ran had to find work. He had to cover 8,000 yuan (US$1,120) in rent and 2,000 yuan (US$284) for car loan repayments each month. With quarantines still in place, he had few options.

Social Stigma

Yang Ge was also anxious about finding a new job. She was stuck in Shiyan, Hubei Province when she was let go from her sales position with a medical equipment firm in Sichuan Province.

She told *ChinaReport* that back in February, her former boss told all sales staff to contact hospitals across the nation and bring in as many deals as possible. Yang, a Hubei native, was encouraged to promote the firm's products in the province's hospitals. When the outbreak struck, she got stuck.

On March 25, Yang's boss called and persuaded her to quit. "He told me I had been made redundant and asked me not to come back," Yang told our reporter. She negotiated one-month's severance.

Looking on the bright side, Yang said she sees it as a rare chance to be with family, particularly one bedridden relative who needs extra care.

Chinese State media has lauded people from Hubei as heroes. During a March 29 broadcast, Chinese Central Television (CCTV) anchor Bai Yansong urged people not to discriminate against those from Hubei and show them kindness and understanding.

"Do not turn the fear and discrimination against Hubei people into the second epidemic," Bai said.

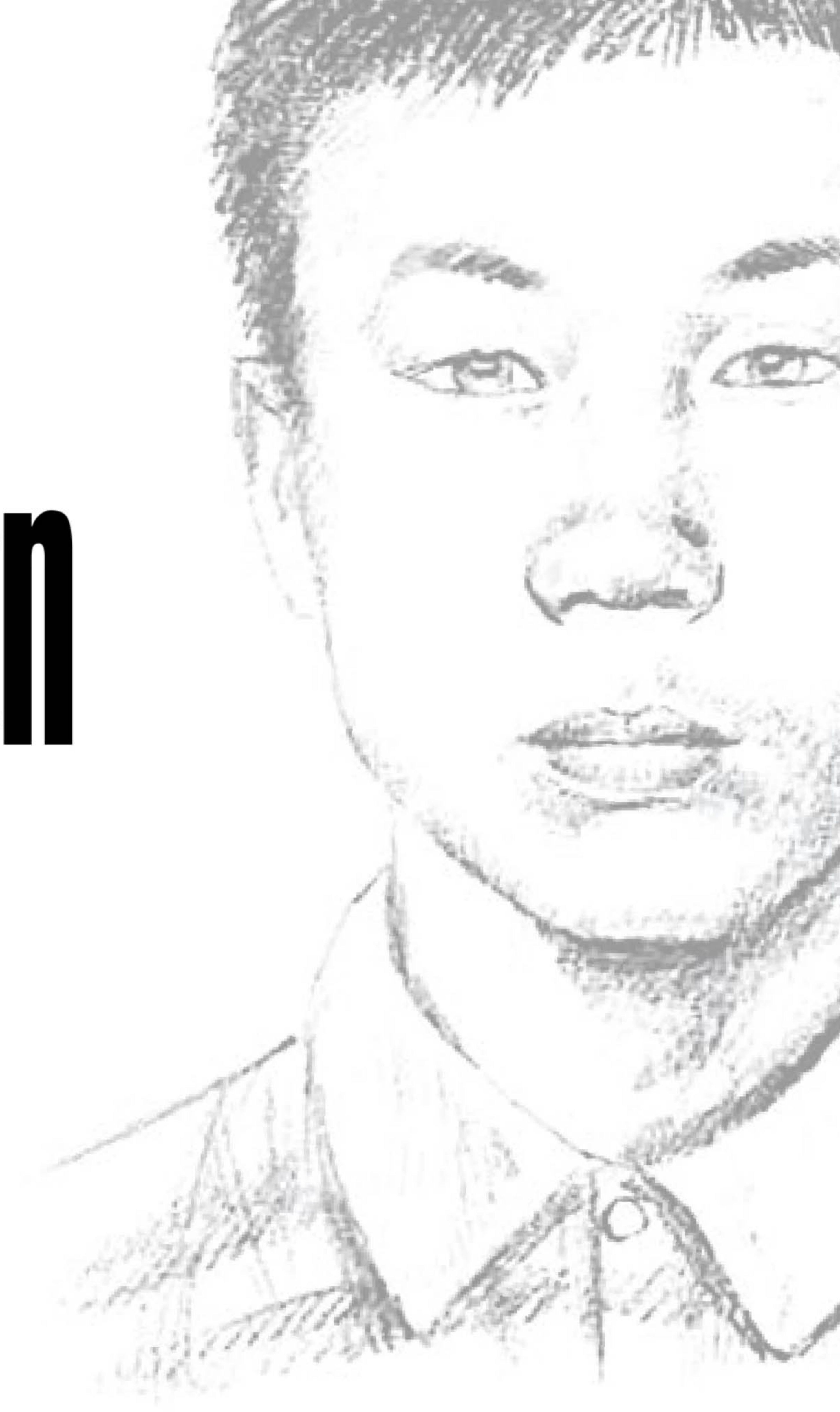
But according to Ran, that message has not gotten across to everyone. He still faces fear and rejection in his job search. In ending our interview, Ran said: "I hope people don't express sympathy and love for Hubei people when talking about us as a collective, but in reality treat Hubei natives as individuals with indifference and cruelty." ★

Child Abduction

Search for a Lost Son

After a search of 15 years that captured the nation's attention, a father is reunited with his son who was abducted as a baby

By Mao Yijun



Artist's impression of a teenage Shen Cong by Lin Yuhui

Shen Cong was dressed in a white worn-out T-shirt when he saw his biological parents for the first time in 15 years. He held his parents, rubbing their backs, saying over and over: "Don't cry, ma and pa."

His father Shen Junliang was speechless, overcome by emotion. Then he asked his son: "All these years, did you know you were abducted?" Shen Cong told his father and mother Yu Xiaoli that although he had seen news on TV about his father's ceaseless quest, he never imagined that he could have been the missing child.

Shen Cong was abducted in 2005 from his home in Guangzhou, Guangdong Province, when he was just a baby. While police in Zengcheng, a district administered by Guangzhou, had arrested the five criminals involved in the abduction in 2016, it took more years to find the abducted boy himself. In 2018, two of the five perpetrators were sentenced to death, two were sentenced to life in prison and the fifth to 10 years in jail.

On the night of March 6, police in Zengcheng announced that they had tracked down and confirmed the identity of the missing boy, now 16 years old. Shen Junliang and his wife Yu Xiaoli immediately set off from Jinan, capital of East China's Shandong Province, to make the long journey south to Guangzhou, not easy in the midst of the coronavirus pandemic.

The following day, officers accompanied Shen Cong to a hotel to meet his biological parents in Zengcheng. His father recognised his son as soon as he saw him. The birthmark on Cong's face remained as it was when he was an infant. Shen Junliang collapsed and burst into tears.

Reunion

For the past 15 years, Shen Cong had lived in an ordinary rural family along with his adoptive grandmother in Meizhou, Guangdong Province. His adoptive parents worked as migrant workers in Shenzhen. He grew up with three siblings, an elder sister and a younger brother and sister.

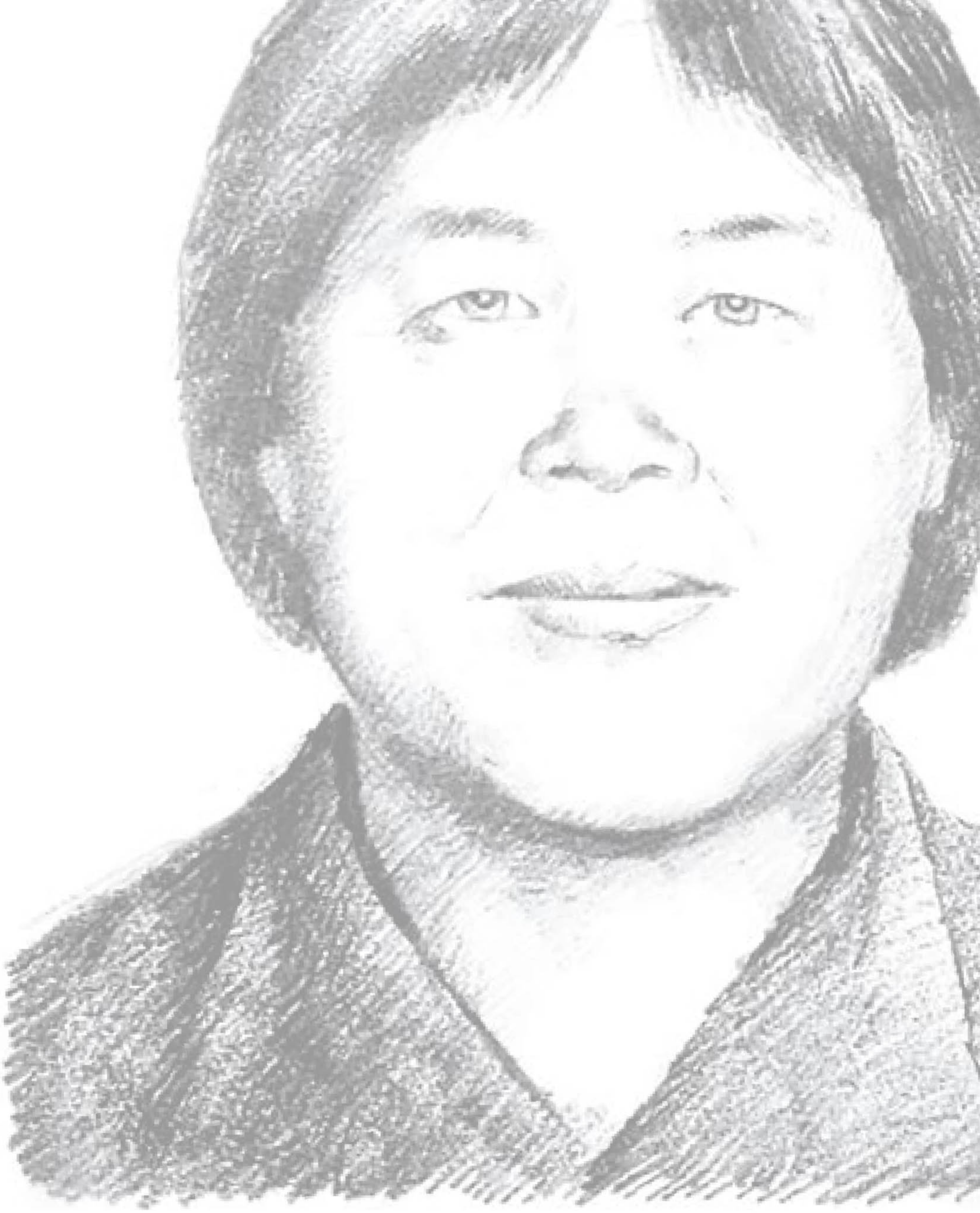
Shen Cong said he used to look at family photos and wondered why he looked different. But no one ever told him anything about the real story of his life.

After the family was reunited, they spent a few days in Zengcheng, staying together in the hotel. It was an unprecedented period of happiness for Shen senior. Every morning, the father and son went out jogging or walking. During the day, when his son was studying online classes due to the Covid-19 epidemic, Shen Junliang would stay quiet or go out so he would not disturb his son's study. Shen Cong told his father that he would try his best to perform well in the senior high school entrance examination this summer.

There was so much chatter between the two, about family, about school life. One night, when Shen senior fell asleep exhausted, he woke to find his son had covered him with a coat. He was so touched

Photo by lin Yuhui

Photo by Lin yuhui



Artist's impression of alleged child trafficker "Aunt Mei" by Lin Yuhui

and expressed that he could never expect that such a moment would come after years of hardship.

Shen Junliang and his wife had been notified by Zengcheng police that they had found their son in late January, and had confirmed his identity with a DNA test, but the reunion was postponed due to the coronavirus pandemic and the difficulty of travelling cross-country.

Before setting off on the journey to meet his son, in early March Shen went to buy new clothes for him and five N95 masks. But he did not know if Shen Cong would like to return home with them. The police had cautioned him that he should stay calm and try not to scare the child. The police had arranged counselling for Shen Cong and told him of his birth parents' story. When Shen Cong learned that, he wept.

Shen Cong was abducted when he was 11 months old. His parents were migrant workers from Henan Province working in Guangzhou. On January 4, 2015 when Shen Junliang was away from home working, Yu Xiaoli was cooking in the kitchen at the couple's rented flat with the baby. She told police that she was drugged and tied up, her mouth covered with tape so she could not scream, by two strangers brought into her flat by two neighbours. As they took her son, she heard his cries fade into the distance.

Yu Xiaoli was pregnant with their second child. The abduction and the psychological suffering led her to be diagnosed later with acute stress disorder. The flat the couple rented in Zengcheng was close to her husband's work, a four-storey building with around 10 households living on each floor. There was a police station near the building, and Shen thought it was a safe place to live. They never expected that they would lose their son right in their own home.

Later, they learned their son was abducted by a group of people involved with one of their neighbours, a man called Zhang Weiping, who lived across the corridor in the same building.

Yu Xiaoli realised that the abduction had been planned. Once, Zhang had taken the baby from his walker in the corridor outside the flat. Yu searched the whole building and discovered her son sitting on Zhang's bed. He said he just wanted to give her son some cookies. Yu had brushed aside the incident.

Shattered Family

Losing their son shattered the family. The couple quit their jobs and started searching for their son. Shen Junliang printed posters offering a reward, crisscrossing Guangdong for years in a desperate attempt to find his son.

In 2016, police detained Zhang Weiping after investigating another child abduction case. Police found that Zhang was a serial child kidnapper, starting in 1999. He had already served two jail terms in connection with child abduction.

Li Guangri, deputy director of Zengcheng public security bureau, told media that after Zhang was detained, he admitted his gang had

Photo Courtesy of Shen Junliang

Shen Junliang on his way from Jinan, Shandong to Zengcheng, Guangzhou to meet his kidnapped son Shen Cong, March 6, 2020

sold several children via a female intermediary known as "Aunt Mei." Zhang also confessed that his gang had broken into Shen Junliang's house and taken his son. The child was sold via the intermediary Aunt Mei for 13,000 yuan ($1,831), he said.

"Aunt Mei" was later alleged to have been a person of interest in several child abduction and trafficking cases, and while there is a description of her circulating, there is little concrete information.

Despite many tips from the public, and a reward offered by police in Guangzhou, Aunt Mei has never been found.

In autumn 2015, Shen Junliang contacted Chen Shiqu, head of the Ministry of Public Security's office for combatting human trafficking, to seek his help. After verifying Shen's information, Chen told Shen that his case would be investigated. In September that year, police from Zengcheng told Shen they were gathering new evidence.

In early March 2016, Zengcheng police zeroed in on a gang of five people, including Zhang Weiping. His accomplices, Zhou Rongping, Yang Chaoping, Liu Zhenghong and Chen Shoubi were all arrested in different places that month. When Shen discovered the gang had been captured, he was so excited he went to buy a school bag and clothes for his lost son and even bought wine and cigarettes to have a celebration.

But police still did not know where Shen Cong was.

During the trial in October 2016 in Zengcheng, the accused told the court what had happened the day Shen Cong was abducted. Zhou Rongping and his wife waited outside the building while Yang Zhaoping and Liu Zhenghong carried pepper spray and tools to break into the flat. They grabbed Shen Cong and sent the boy to Zhang Weiping, who later sold the boy for 13,000 yuan (US$ 1,837) to the intermediary.

Shen Junliang was outraged during the court hearing. Zhang, standing in front of Shen, confessed that he sold the child to Aunt Mei, a local person in Zengcheng, who frequented a mahjong club on Xiangjiang Road. Shen Junliang went there to see what he could find out. He spoke to a shoe polisher who had been doing business there for years, who claimed that he knew details of a family that had bought a child. But police investigations failed to turn up further information.

In June 2017, Zhang Weiping disclosed new information, claiming he was involved in the abduction of nine children from 2003 to 2005. They were all sold through Aunt Mei to families in Zijin County under the city of Heyuan in Guangdong. Shen senior shifted his focus to that area. He carried three photos, a baby picture of his son and an artist's impression of what his son would look like aged 13, with the birthmark on his left eye clearly identified. He also had the photofit of Aunt Mei, who was supposedly around 65, 1.5 metres tall, and spoke Cantonese and Hakka, a dialect of southern China.

Police released a statement in November 2019 stating they had tracked two of the nine children Zhang confessed to having abducted.

Zijin is a mountainous place in northern Guangdong, 200 kilometres from Guangzhou. According to the police investigation, Aunt Mei had sold the child in a restaurant opposite the main bus station to a couple in their 30s. The former restaurant boss had even dined with them as they reached the deal, police said.

When police from Zengcheng found the restaurant owner, he denied all knowledge of the case. He told Shen senior he had sold the restaurant in August 2004.

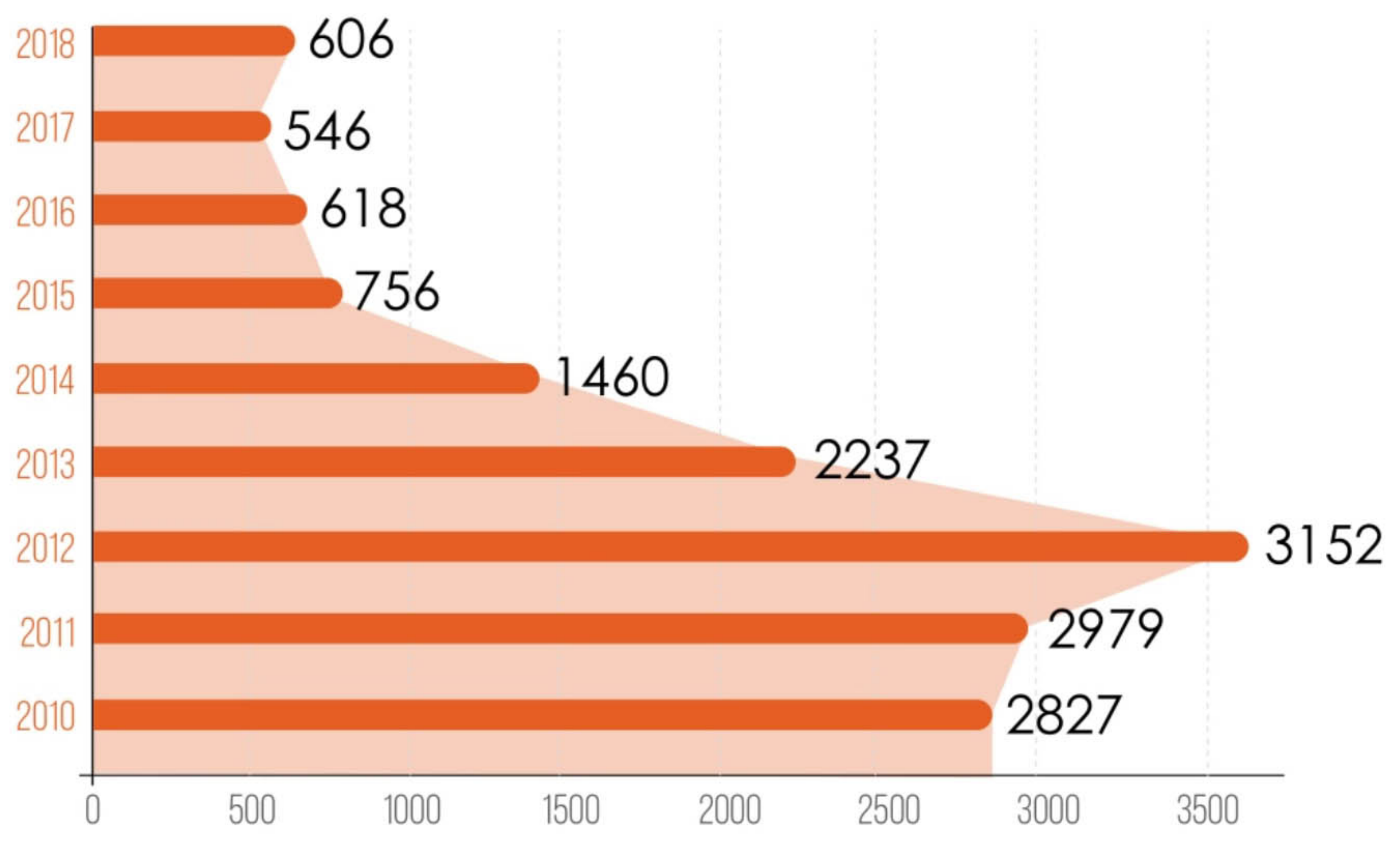
Artist's Impression

The artist's impression of an older Shen Cong was drawn by Lin Yuhui, who had retired from the physical evidence identification centre at the Department of Public Security of Shandong Province. Lin was well known as an expert in making sketches for identification purposes. He had worked for the International Criminal Court, and was known for his sketch of a man accused of kidnapping and murdering Chinese student Zhang Yingying in Illinois in 2017. Shen senior asked if Lin could help create a picture of an older Shen Cong.

"It's a big challenge for any sketch artist in the world to create an older portrait based on a childhood photo," Lin told *ChinaReport*, He said it was the first time he had tried to do one based on a baby. Using the baby picture and photos of the parents and their two younger children, it took Lin several hours to do the finished sketch.

Shen Junliang returned to Zijin County with the picture in 2017.

Solved Child Trafficking Cases in China (2010-2018)



Source: National Bureau of Statistics

There was no progress, so he asked Lin to do another sketch. When he returned to Zijin with the updated picture, he was joined by other parents who had travelled from across the country, also seeking their children who had been abducted by the same gang. They joined to search for their lost children in Zijin.

There was no news until 2018, when Zhang Weiping claimed that a man called Peng Jiaqing had lived with Aunt Mei in Huangsha Village in Zijin County. Zengcheng police interviewed Peng, who said that Aunt Mei had disappeared when the two were planning to get married after having lived together for two years.

In September 2018, Shen Junliang went to Huangsha Village and posted the sketch of Aunt Mei everywhere. But there was no new information.

In 2019, Zengcheng police asked Lin to make a second sketch of Aunt Mei based on new information provided by Peng Jiaqing, giving a more detailed description of her.

On November 9, Lin sent the new portrait to Shen Junliang, and he immediately released it online. Media soon followed up and started to spread the portrait, which made the case even more high profile. People were looking for Aunt Mei everywhere.

The online storm abruptly ended on November 18, when the Ministry of Public Security announced that the second sketch of Aunt Mei was not officially authorised. It said there was not enough evidence to prove the existence of Aunt Mei or what she looked like if she did. They denied inviting an expert to sketch a second portrait of Aunt Mei and added that Guangdong police were still trying to find the other seven abducted children.

Many of the other parents were forced to give up the search in Zijin after a week due to work, family commitments or lack of money. One father was driven to despair by the failure to find his child and committed suicide by jumping in front of a train. Shen Junliang was the only one who remained.

Return Journey

In 1997, Shen Junliang left his hometown in Henan Province to work in Guangdong. Initially, he worked in Dongguan as a warehouse guardian. By 2005, he was working as a department manager for a toy company at a monthly salary of over 5,000 yuan (US$707). By then he was a 28-year-old man with a promising future. But three months after his son was abducted, he quit his job and sent his wife back home. He stayed in Guangdong and started the tenacious search for his son.

Before 2017 when he narrowed the search to Zijin, he had been to all the major cities in Guangzhou in his quest. He sold a parcel of land at home, then their combine harvester and even a house belonging to his family to finance his search. He spent all the family savings and borrowed from relatives. By 2017, according to Shen, he owed over 500,000 yuan (US$70,551).

Since early 2019, Shen has worked for a factory in Jinan, Shandong Province as a lorry driver. His family moved to Shandong and rented a house in the outskirts. He continued to seek any information about his lost son and was ready to drop everything to return to Guangdong if necessary.

Over 15 years, Shen spent 1.5 million yuan (US$211,655) and distributed over 1 million posters looking for his missing son and even offered a reward of 200,000 yuan (US$28,220). One time when he was in Shenzhen, he was robbed by gangsters of all his valuables including his phone, watch, gold ring and cash. At that moment, he told the reporter that he felt so helpless.

Investigators have not disclosed any details about how Shen Cong's adoptive parents bought him. *ChinaReport* tried a few times to contact police in Zengcheng and was told the investigation into what happened is ongoing. At a March press conference, Li Guangri announced that there was no evidence to prove the existence of Aunt Mei, and all information about her came from the single source of Zhang Weiping in 2016. Police did not say how they finally tracked down Shen Cong.

Shen senior has experienced so much over the years, so when his son was finally standing in front of him, no one could understand the complicated set of emotions he was feeling. As Shen Cong agreed to go with his birth parents, Shen Junliang was finally relieved and started to arrange for his son to enroll in a new school in Shandong. ★

Environmental Assessment

The Fudge over the Dredge Report

A plagiarised environmental impact assessment for a controversial dredging project in Shenzhen has caused outrage, and a halt to the tourism scheme that conservationists always opposed

By Yang Zhijie

A high-profile tourism project in Shenzhen, Guangdong Province has been shelved for now after environmental groups found that much of its environmental impact assessment (EIA) was either fake or plagiarised. When Shenzhen Transportation Bureau released the EIA online for public comment on March 19, which would allow a scheme to dredge a new channel in the bay for longer sightseeing cruises, environmentalists immediately smelled something fishy.

Not only were environmental experts and a majority of the public already opposed to the project, as it is close to ecologically

Photo by VCG

People gather to look at birds at Shenzhen Bay on January 29, 2019

sensitive coastal wetlands and bird habitats, but the EIA itself proved problematic. Parts of it appeared to have been copied directly from a previous EIA for another city in Guangdong, with the name of the city and other significant details left unchanged.

These errors immediately drew wide criticism from netizens who suspected the EIA had been plagiarised. In late March, the Shenzhen Navigation Route Affairs Centre who had contracted the report issued an apology. The institution that compiled the EIA, the Guangzhou-based South China Sea Institute of Oceanology (SCSIO) affiliated with the Chinese Academy of Sciences, also posted an online apology for the fraudulent EIA which was authored by engineers at the institute. It stated that an investigation was underway. Shenzhen Transportation Bureau demanded termination of the contract with the SCSIO.

This EIA report scandal is the tip of the iceberg over the widespread lack of credibility of EIAs in recent years. In March 2018, the Ministry of Environmental Protection announced that 143 EIA institutes were found to have been involved in misconduct that broke regulations, and 256 engineers responsible for EIA report writing were punished.

Conservationists had opposed dredging in Shenzhen Bay from the start. The planned route with an initial estimated cost of over 100 million yuan (US$14.2m), would cut a channel 120 metres wide and 3.1 metres deep, which would enable the expansion of scenic cruises in the area.

Conservationists worried that the route of the dredged channel, only 200 metres from a mangrove area and a habitat for migratory birds, would severely impact the environment and threaten the survival of birds and bottom-dwelling marine species. According to an online poll conducted by Guangdong newspaper the *Nanfang Daily*, 79 percent of respondents opposed the dredging project, saying they were concerned about its potential ecological impact.

Shenzhen's Transportation Bureau said the channel would allow cruise operators to offer trips to the east side of the Shenzhen Bay Bridge, including the Talent Park, an urban park, and the Mangrove Ecological Park.

Ecological Destruction

Ma Haipeng, executive secretary of the Shenzhen Blue Ocean Conservation Association, noticed the EIA report online on March 25. As a local environmental NGO, Ma's team studied the report thoroughly and found a vital omission: The project is located inside a key protected bird habitat. The EIA completely overlooked this fact and did not mention any impact caused by the dredging and the follow-up operations on migratory birds in the area.

Shenzhen Bay lies between Shenzhen and Hong Kong, and it has a typical wetland ecological system, effective for climate adjustment, water purification and natural disaster prevention.

Futian Mangrove Protection Zone is home to over 200 bird species, among which 23 are national key protected bird species. Shenzhen Bay is a key stop on the Siberia to Australia bird migration route. Bird watching is popular in Shenzhen Bay for domestic birders from November through March. This January, it was estimated that over 100,000 birds including egrets, gulls and geese visited the area. To protect the birds, Shenzhen authorities banned all fishing in the bay from 2014.

"The controversy about this EIA is its complete lack of evaluation of the project's impact on the migratory birds and mangroves," said Cai Zhiyang, associate professor at the School of Environmental Science and Engineering at the Southern University of Science and Technology. He said that previous studies have tracked the birds' density and activities in this area. "Through wireless tracking, satellite monitoring and ringing of birds, scientists can track the water birds as they go back and forth between habitats in Shenzhen and Hong Kong. The dredging project in eastern Shenzhen Bay includes the area in which water birds are active," Cai said.

Cai said that migrating birds need sufficient food and space in winter in the Shenzhen Bay area, and human activities in the channel where the dredging is planned will disturb the habitat. This may cause migratory birds to abandon the habitat due to construction and subsequent pleasure cruises.

The EIA stated that more than 76 hectares of seabed – known as the benthic region – would be destroyed. "The loss of benthic marine species due to the dredging of the new channel will result in a loss of food for migratory birds. The dredged mud and sand will spread even further and impact an even larger area," Cai said. "Moreover, the channel will need regular dredging, so the impacts will continue."

Wang Yongjun, a Shenzhen-based ecologist who specialises in mangroves told local media that water pollution caused by the project will impact mangrove seed dispersal. Mangroves have a unique propagation system known as viviparity – producing live offspring – where they germinate seeds on the branch, which then drop into the water and either take root or float away.

The Cross-border Environment Concern Association (CECA), an NGO in Guangdong Province, also pointed out that phase one of the dredging project will intrude into the wetland red line area and likely intrude on the mangrove ecological red line area in Shenzhen Bay in the second phase.

According to Ma Haipeng, the red line system strictly prohibits any land reclamation that causes changes to the natural marine ecology or destroys wetland ecological system functions. If the channel does not include dredging activities to disturb the water momentum, the project can pass the EIA. Otherwise, it cannot.

Plagiarised Assessment

Challenged by inquiries from the public, on March 25, Shenzhen Transportation Bureau responded that phase one of the dredging project in Shenzhen Bay was not included in the provincial ecological red line system.

Wang Yongjun pointed out that the ecological system in Shenzhen Bay is holistic and includes Shenzhen Futian Mangrove Reserve and the Mai Po Wetland Park in Hong Kong, thus the project should assess the environmental impact on both wetland reserves.

What really enraged the public, though, was the discovery that much of the EIA for the Shenzhen Bay project had been plagiarised from another EIA report for a port project in Zhanjiang, 500 kilometres from Shenzhen.

Ma Haipeng's team found that Shenzhen was referred to as Zhanjiang 35 times. Furthermore, although the project was announced in December 2019, much of the data collected by the contractor for the EIA dated from 2017 and 2018.

These obvious errors aroused suspicions about the science, effectiveness and accuracy of the EIA.

Under increasing scrutiny, on March 27, Shenzhen Transportation Bureau withdrew the EIA from public view and the SCSIO started investigating. On April 1, the SCSIO published its findings and admitted that the report had been copied from an earlier EIA. "Part of the report is identical to the qualitative analysis of another report conducted by the same institute on the renovation of a navigation channel for 300,000-ton vessels at Zhanjiang Port; Xu Yufen, the person in charge of the EIA report for the Shenzhen Bay project, who did not follow the regular procedure and delivered the report without authorisation from the SCSIO, is fully responsible for the fraud. Due to insufficient supervision of its employees' work, the SCSIO as the contractor to provide technical consulting to the project led to Xu Yufen's fraudulence in presenting the unfinished report," the investigation said. The SCSIO said it would terminate the contract, return the full cost immediately, and promised no future connection to the project.

Xu Yufen was fired. Environmentalists questioned how one person could be blamed for the debacle. China Biodiversity Conservation and Green Development Foundation posted a public notice on its Weibo account on April 1 asking the SCSIO to disclose the names of everyone involved in the fraudulent EIA, who should also be held accountable.

Guangdong Province Ecological Environment Department vowed to crack down on fraud in EIA processes, announced an investigation and promised to penalise those found responsible.

Wang Yongjun told the *Nanfang Daily* that the construction company for the project should also take responsibility. During the bidding process, the party that issued the contract for the EIA was aware that the SCSIO did not have expertise in conducting research on birds, and so it should have found an appropriate contractor to suit the local conditions.

Wang Yongjun took part in an expert panel to analyze the project in early 2019. "All the experts, including those from Peking University, clearly expressed their opposition to the project and presented their opinions to Shenzhen Transportation Bureau," Wang said. "As far as I understood, the project was killed by the participating experts, but I did not expect Shenzhen Transportation Bureau would proceed with the EIA report after consulting with experts on this."

Development Ambition

The dredging project is primarily aimed at expanding tourism in the form of sightseeing cruises. The overall tourism project is named "Sightseeing Shenzhen from the Sea." The first sightseeing boat was launched in November 2017, departing Shekou Cruise Centre and Shekou Port to Shenzhen Bay Bridge and back for a twice-daily voyage of 100 minutes.

Song Dingceng, director of the Tourism and Real Estate Research Centre at the China Development Institute, contended the tourism project is valuable for local development. “It’s an important and very astounding perspective to see Shenzhen from the sea, and it will allow more people to realise how beneficial the ocean is to the city,” Song said.

Zhou Junmin, director of the China Development Institute, who has been living in Shenzhen for more than 20 years, said the sea tourism project was intended to help push momentum for the city apart from its already established industries. But as it stands, the project has limited prospects due to inconvenient transportation at the port and the restricted sailing routes for the cruise ships. Official statistics show that by September 2019, only 50,000 tourists had gone on the boat trips.

The fake EIA did point out the obstacles to developing the project: The views are not inspiring, either by day or by night, and the sightseeing boats are not of a high standard.

That was why local authorities decided to explore whether the route could be extended under the Shenzhen Bay Bridge as the views would be better and the trips more interesting.

The planned channel from Shekou Port to Shenzhen Estuary would be a 300-ton class coastal waterway of 17 kilometres and is projected to cost 100 million yuan (US$15.5m). The first phase of the project to Talent Park requires four kilometres of dredged waterway, and the area of sea used for dredging is about 48.5 hectares, which does not occupy the shoreline.

Ma Haipeng said that although the project was described as dredging, in fact it would be a completely new channel. After the dredging, more investment would be required, such as building new pleasure cruisers, constructing a wharf in Talent Park, installing a night light show and constructing anti-impact measures for Shenzhen Bay Bridge. At the same time, Shenzhen Bay is an area of high siltation, requiring regular dredging which is already costly. The first tranche of the investment, 100 million yuan (US$14.1m) is only earmarked for the early dredging.

The Sea View Shenzhen project officially began in September 2019 when local authorities announced the upgrading and dredging of the cruise channel. In early November 2019, Shenzhen Transportation Bureau ordered officials to go to Talent Park to study where the wharf would be sited, with plans for a 2,000-ton passenger berth.

The project was incorporated into the work plan of the Shenzhen municipal Party committee and government, with a planned launch date of August 26, 2020, the 40th anniversary of the Shenzhen Special Economic Zone. But after the fraudulent EIA became public, the entire project was halted. *ChinaReport* contacted Shenzhen Transportation Bureau to ask about its future, but did not receive a reply.

Some have questioned why Shenzhen should not develop coastal boat trips like other seaside destinations in China.

Environmentalists counter that Shenzhen, due to its geographical location, cannot refer to the experience of sightseeing tourism adopted by other coastal cities. “The conditions in Shenzhen Bay are not comparable to those in other coastal cities such as Shanghai. For example, the Huangpu River in Shanghai is surrounded by buildings and existing waterways and can be developed without dredging,” Ma Haipeng added.

Ma said that despite the limitations of Shenzhen Bay due to geography and ecology, authorities are still determined to continue with the dredging project.

Shenzhen Bay’s significance is its ecological value. Cai Zhiyang said that where there are sightseeing cruises in places such as Shanghai or Hong Kong, the waters are already deep, and thus, despite tidal effects, low tides do not reveal extensive intertidal wetlands. Most importantly, these cruise areas do not possess rich biodiversity or migratory bird resources.

Ecological protection and tourism are not necessarily incompatible. “The current problem is a lack of in-depth discussion among stakeholders, especially when they deprive participation of environmental protection experts with background in fields like mangroves and birds, including representatives from protected areas in Shenzhen Bay and the mangrove ecological parks,” Cai said.

Song said that the best way to develop the project is to organise a group of experts to evaluate the overall resources of the region before considering whether the route needs to be changed.

According to Lei Xiaohan, an engineer with the Shenzhen Municipal Planning and Transportation Department, the city must choose between tourism development and bird protection.

Cai’s study found that some 15 percent of intertidal wetlands have been lost globally over the past 30 years due to man-made interventions, particularly for economic activities. From 1990 through 2015, about 40 percent of the wetlands were reclaimed by Shenzhen. The only remaining intertidal wetlands are located on the east side of Shenzhen Bay.

“Shenzhen’s intertidal wetlands have made a lot of concessions for the economic development of Shenzhen during the past few decades. Do we really need to exhaust all the natural resources for a development plan?” Cai said. ★

Construction is underway at the site of Jiasajiang Level 1 Power Station on the Red River in Yunnan Province in 2017

Biodiversity

Dammed If They Don't

Environmentalists are considering their next move after a court halted construction of a dam in Yunnan Province set to destroy the habitat of the endangered green peafowl. But is the project halted for good?

By Zhou Qunfeng

Environmentalists in China are pondering their next move after the success of a lawsuit filed to halt construction of a hydro power project in Southwest China's Yunnan Province to protect the highly endangered green peafowl, thought to number only a few hundred.

Brought under changes in the Environmental Protection Law which took effect in 2015 that allows NGOs to pursue civil interest litigation against polluters to prevent environmental damage, rather than polluters paying fines to clean up their mess after the fact, Kunming Intermediate People's Court released its ruling on March 20, halting construction on the project.

According to the landmark judgement, the defendant Hydro China Xinping Development Company should immediately cease construction of the Jiasajiang Level 1 Power Station, and is not allowed to block the natural flow of the river or cut down trees in the area that is earmarked to be flooded by the dam's reservoir.

Zhang Boju, secretary-general of Beijing-based environmental NGO Friends of Nature, told *ChinaReport* that the court's ruling could only be described as having pressed pause on the project, and a resumption of the dam remains possible.

Jiasajiang Level 1 Power Station is a key hydropower project in Yuxi, in the upper-middle reaches of the Red River in Yunnan Province. Launched in March 2016, the total cost of the project is estimated at 3.9 billion yuan (US$550 million).

Yet field investigations by environmental NGOs and biologists since 2016 discovered that if the dam were to be completed, it would completely inundate the primary habitat for the highly endangered green peafowl, as well as many other rare species such as *Cycas chenii*, a species of cycad plant that was first discovered in 2015 and which is endemic only to the Red River valley.

In September 2017, Friends of Nature filed a lawsuit against the companies responsible for developing Jiasajiang, including Xinping which was contracted to build the dam and Kunming Engineering, an offshoot of the Power Construction Corporation of China which had carried out the project's environmental impact assessment. In August 2018, the court held a hearing.

The green peafowl is categorised as a first class national protected wild bird in China. In the 1990s, there were an estimated 1,000 green peafowls in China. The number dwindled significantly and according to a survey conducted by the Kunming Institute of Zoology in 2013 and 2014 in areas where there were historical records of the species, there were fewer than 50 birds, all in Yunnan Province. *Cycas chenii* is also a first class protected wild plant in China, categorised as critically endangered species on the provincial red list.

Elusive Peafowl

Gu Bojian, a keen birdwatcher, was a postgraduate student at Xishuangbanna Tropical Botanical Gardens, Chinese Academy of Sciences in 2013. In November that year, his supervisor assigned him to research rainforest growth in the Red River valley bordering Shuangbai County, the Chuxiong Yi Autonomous Prefecture, and Xinping Yi and Dai Autonomous County, Yuxi, in Yunnan Province.

He told the reporter that when he arrived in the field, villagers mentioned they had spotted a green peafowl in the neighbourhood and showed him some feathers. Gu was curious.

"The green peafowl is as precious as a giant panda, and it was

Photo by Xi Zhinong

thought to be already extinct in China," Gu said.

As the biggest member of the pheasant family, the green peafowl is listed as endangered on the international IUCN Red List and categorised in Appendix II to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Appendix II lists species that are not necessarily now threatened with extinction but that may become so unless trade is closely controlled.

The green peafowl is similar to the Indian peafowl. The adult male has brilliant glossy green and black plumage with a long train which can be over one metre long. There is a long upright blue-black crest on its head. The adult female is similar with shorter legs and duller colours.

Wang Jian, an associate professor at the Life Science and Technology School at Honghe University, in Mengzi, Yunnan, told *ChinaReport* that the green peafowl is distributed in Southeast Asia with dwindling numbers. In China, the species is now confined to a limited area in Yunnan. In May 2017, Yunnan Provincial Environmental Protection Department released the Yunnan Province Biological Species Red List (2017), which categorised the green peafowl as critically endangered.

In the past, the species was also distributed in China in Hubei, Hunan, and Guangdong provinces, and the regions of Guangxi and Tibet. By the 1990s, there were around 800 to 1,000 birds in Yunnan, the Xinhua News Agency reported in May 2018.

Kong Dejun, an associate professor at the Life Science and Technology Department at Kunming University told Xinhua that they had recorded 183 to 240 green peafowl. "Considering uninvestigated regions where the species might appear, we estimate that the total population of green peafowl is less than 500. At the same time, the number of individuals in one flock has declined from 8 to 15 birds down to 3 to 5," Kong said. Major threats for the species include habitat loss, hunting, poisoning and dam building.

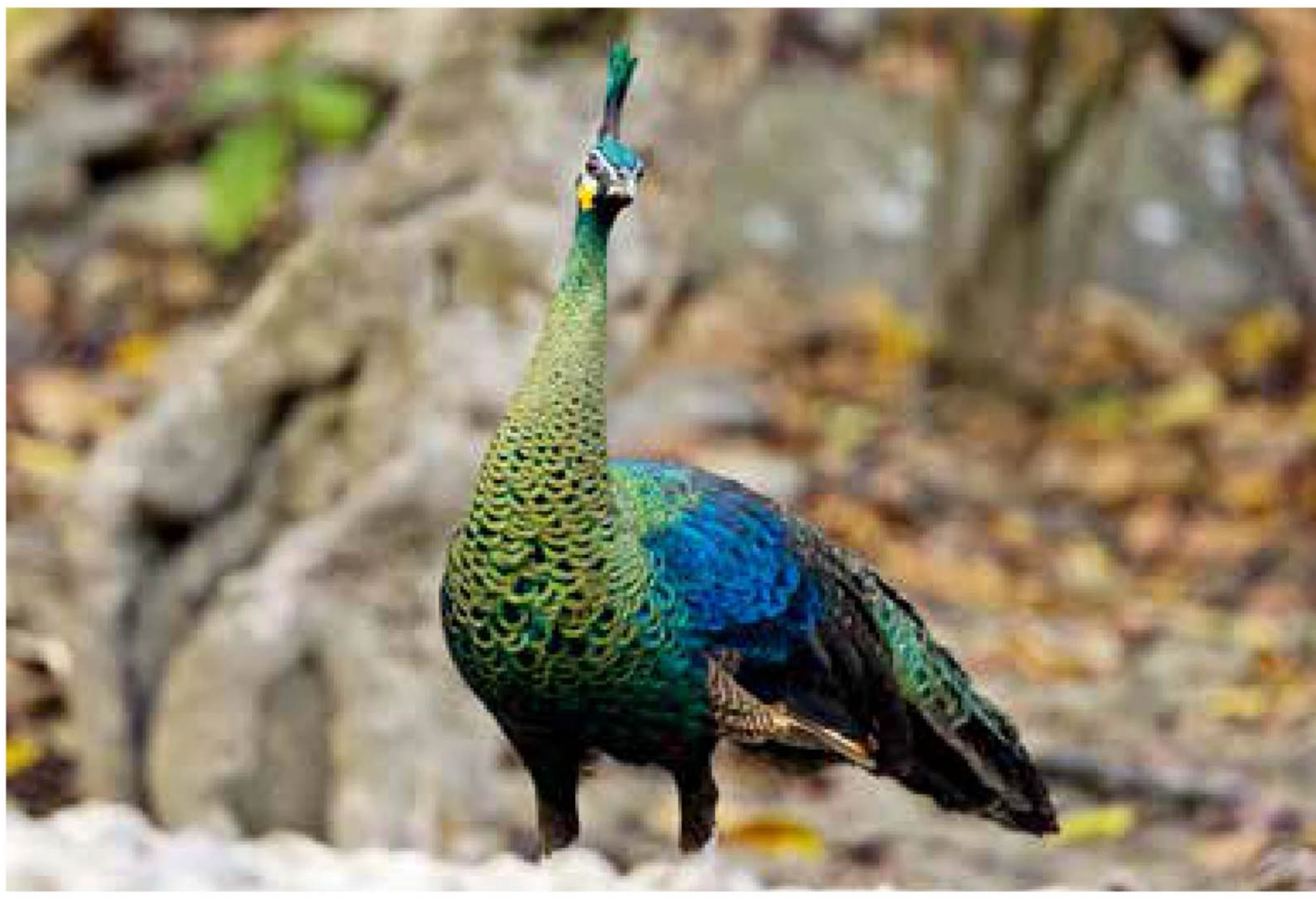
In 2013, Gu Bojian spent 20 days doing field research but failed to spot any green peafowl. At the same time, he learned that a planned hydropower station in the lower reaches of the Red River would ruin one of China's last unspoiled tropical forests, home to many tropical plants and animals, including the green peafowl.

Construction on Jiasajiang Level 1 Power Station called for the river flow to be blocked in November 2017 with the aim of generating power by August 2020. The project's launch ceremony was held on March 29, 2016. It was listed as a key project by the Yunnan provincial government in 2015. According to the plan, the dam would be 175 metres high and the installed power generation capacity would be 270,000 kilowatts.

That section of the river valley is the main breeding ground for the green peafowl. Every March and April, during the mating season, they can be spotted frequently. In March 2017, Gu visited the Red River and heard the call of the peafowl. "It was late afternoon when I heard the green peafowl from the deep valley. It was so exciting when the echoing sound of the peafowl was so clear amid the background noise of crickets and insects," Gu told *ChinaReport*.

In order to protect the green peafowl's habitat, Gu Bojian sought help from Xi Zhinong, founder of Wild China Film and a well-known wildlife photographer and conservationist.

On March 15, 2017, Xi and his team went to Xinping to visit the dam construction site. The trip allowed him to spot and film around



The critically endangered green peafowl numbers only in the hundreds in Yunnan Province

eight green peafowls, including a peafowl drinking water by the riverside. Wild China Film released an online article headlined "Who Kills the Green Peafowl? China's Last Complete Resort for the Green Peafowl is Disappearing," which gained public and media attention. In April 2018, Gu Bojian, for the first time, spotted a green peafowl in the forests in the area.

On June 29, Yunnan government released an official document on the "Yunnan Provincial Ecological Preservation Redline," which listed habitat regions for 26 endangered species, including the green peafowl, to ensure the protection of such areas. Most of the area earmarked for flooding by the reservoir of Jiasajiang dam was within protected areas.

Court Intervention

On March 29, 2017, three environmental NGOs including Wild China Film, Friends of Nature and the Beijing-based Shan Shui Conservation Centre sent a letter to the Ministry of Environmental Protection (MEP) and the Ministry of Forestry to express their concern over the national first-class protected bird, describing the damage the dam would cause to the habitat and proposing that construction be stopped.

On May 8, 2017, the Environmental Impact Assessment Department under the MEP invited the three NGOs, local government officials and the construction company to a meeting in Beijing to share their perspectives on the impact of the hydro station on the green peafowl.

At the meeting, the local government and the company said they would conduct investigations into the impact of the dam, but neither said the project would be halted.

Friends of Nature decided to file a civil suit against both Xinping and Kunming Engineering, requesting an order for both companies to stop making further threats to the survival of the green peafowl, immediately halt construction of the hydropower station, stop blocking the river and flooding the area, and stop cutting trees in the region.

On July 21, 2017, the MEP sent an official letter requesting Xinping to stop backing water up behind the dam before it had completed a post-environmental impact assessment and said it should take effective measures to reverse the impact.

ChinaReport learned that in August 2017, Xinping stopped construction. Xinping responded to *ChinaReport* that because the company realised the impact of the project might lead to an indefinite suspension, it did not conduct its post environmental impact evaluation as required by the MEP.

The same month, Chuxiong Intermediary People's Court accepted the lawsuit. He Yini, director for Law and Policy Advocacy at Friends of Nature told *ChinaReport* the evidence gathering process afterward had two main strategies. One was accessing the documents which gave administrative approval for the dam from the local government and the other was on-site evidence from the project area. "The former was much easier to acquire than the latter," He said.

Almost 80 percent of the area to be flooded by the reservoir is uninhabited with no roads. He said a team of 30 experts including biologists, photographers and environmentalists rafted along the river to gain access. "We stayed in that uninhabited area for a few days, camping in the mountains." On the riverbank, scientists found footprints and feathers left by green peafowls and they captured video of the bird as well. Zhang Boju said they used camera traps and long lenses to capture images of the bird and record its activities.

The hearing was held at Kunming Intermediary Court on August 28, 2018. Xi Zhinong and Wang Jian appeared as expert witnesses, telling the court of their experiences seeing the green peafowl in its habitat and presenting their photographic and video evidence.

The defendant alleged the habitat of the green peafowl was mainly located in Konglong River Nature Reserve which covers an area of some 10,000 hectares in Chuxiong, while the area that would be flooded is not inside the nature reserve. Friends of Nature presented evidence, including a report on the Konglong River Nature Reserve Readjustment, showing the reserve shrunk by 7.8 percent after its boundaries were adjusted three times since it was set up. According to Friends of Nature, one of the reasons why the nature reserve was made smaller was to make way for the construction of the Jiasajiang hydropower station, since the area that was excluded from the original plan matched exactly the earmarked inundation area of the dam.

Dodgy Assessment

During the hearing, Friends of Nature questioned the role Kunming Engineering played in the environmental assessment report. Kunming Engineering, it turned out, was a shareholder in Xinping, so it represented a conflict of interests.

It was unlikely it would be objective in completing the report, thus it was probable it would downplay the project's ecological

Photo by Xi Zhinong

Photo by Friends of Nature

Cycas chenii, a rare type of cycad endemic only to the Red River valley in Yunnan Province

damage in its environmental impact assessment.

ChinaReport found information on Tianyancha, an enterprise information provider, showing that the shareholders in Xinping are Hydro China with 80 percent and Kunming Engineering with 20 percent.

According to He Yini, current laws do not prohibit stakeholders in related projects to conduct environmental impact assessments, even if the assessment is vital for preventing ecological damage.

"For projects which will potentially cause environmental pollution, a biased environmental impact assessment report might result in pollution during the production process, while the administrative organisations can still control the pollution through supervision and punishment," He Yini said. "If the environmental impact assessment failed to fulfill a scientific evaluation of wildlife distribution within the area and the potential ecological impact towards species, then these projects will lead to irreversible ecological damage."

The lawyer acting on behalf of the plaintiffs told the court that apart from the green peafowl and *Cycas chenii*, there were a number of national second-class protected plants including some orchid species, as well as second-class protected birds including brown fish owls, black necked pheasants and green bee-eaters distributed in the earmarked reservoir area. Furthermore, the environmental impact assessment did not mention anything about the impact of the project on the rainforest.

Uncertain Verdict

According to the written judgement of the first trial, there must be a post-environmental impact assessment according to the MEP's prior request, the dam must adopt improved measures on its environmental impact evaluation and report to the MEP before there is any further decision on the future of the project.

Zhang Boju told *ChinaReport* the judgement could be interpreted as the court only having paused the project and no one knows if it will resume. "Our main goal is to stop the project permanently, otherwise it will cause damage to these endangered species and their habitats. But now, this is actually not what we expected," he said. They hoped the court case would put a stop to the dam for good, he said.

On March 25, four environmental NGOs, including Friends of Nature, Shan Shui Conservation Centre, Wild China Film and the Society of Entrepreneurs and Ecology (SEE) Foundation sent a letter to the Ministry of Ecology and Environment (the new iteration of the MEP), suggesting it withdraw the environmental impact assessment report for Jiasajiang Level 1 Hydro Power Station and order a permanent halt to the construction.

Li Chunguang, executive director of Yunnan Lingyun Law Firm told *ChinaReport* that theoretically, if authorities accepted the post-environmental impact assessment in the future, construction on the hydropower project could resume. "But I perceive that after the Covid-19 pandemic, general public awareness towards environmental protection has gained unprecedented strength, thus leading to improved attention from administrative departments to address such issues. I hope environmental authorities will listen to the experts' suggestions and make a wise decision on this issue. Therefore, I believe the resumption of work would be prolonged and the possibility for the resumption of the construction might be low."

Sources told *ChinaReport* that the Jiasajiang hydro project, which had pulled in investment of more than 1 billion yuan (US$141.3m), has already been suspended for some time. After the judgement, a staffer from Xinping said the company had yet to make a decision as to how to proceed – whether to appeal the ruling or follow it and conduct a new environmental assessment.

On March 26, Li Shuangjun, who represented Xinping and Kunming Engineering at the hearing told *ChinaReport*: "We haven't decided yet whether to appeal the court ruling."

Even if there is an appeal, which may anyway uphold the ruling of the first hearing, "any decision on whether construction of the dam will be halted for good will need to come from the government," said Li Chunguang. ★

Rural Economy

Photo by Xinhua

Bamboo rats at a farm in Qinzhou, Guangxi Zhuang Autonomous Region

RAT RACKET

A ban on the sale and consumption of wild animals – a vector for the spread of Covid-19 – threatens to drive thousands of bamboo rat breeders in South China back into poverty

By Gu Xin

Xie Fujie was doing some Chinese New Year shopping on January 22 when he took the call. He said he hadn't heard the news.

A Beijing journalist contacted the 27-year-old bamboo rat breeder after Chinese health authorities announced that wild animals, including bamboo rats, were suspected vectors of the SARS-CoV-2 virus that causes Covid-19.

The call came as a heads-up for Xie. The next day, he said that forestry officials visited his farm in Dingle County, Guangxi Zhuang Autonomous Region, informing him the sale of bamboo rats was not allowed and only workers would be allowed on the premises.

A month later, on February 24, the Standing Committee of the National People's Congress, China's top legislature, passed a resolution that banned the trade and consumption of wild animals.

Xie said he worried the resolution would take down China's entire bamboo rat breeding industry.

While breeders export to Southeast Asia, domestic demand makes up most of the market. Liu Kejun, Xie's technical adviser and senior engineer at Guangxi Animal Husbandry Research Institute, said that Guangxi is home to 100,000 rat breeders and 18 million bamboo rats valued at 2 billion yuan (US$283m), accounting for 70 percent of the national market.

The Ministry of Agriculture and Rural Affairs (MARA) is drafting a white list that would exempt some animals from the ban, forcing policymakers to choose between economic gain and public health.

Fragile Industry

At 9am each day, Xie drives to his farm to feed his livestock. In 2019, he invested 4 million yuan (US$565,000), including 3 million yuan in loans, for his 2,800 square metre breeding facility.

To cut costs during the outbreak, Xie fired four of his seven employees. It takes seven hours to feed his 10,000 rats every day, which costs more than 1,000 yuan (US$141). Native to China and Southeast Asia, the rodents can reach up to 25 centimetres long and mainly eat the roots and shoots of bamboo and sugarcane, among other plants. Crop farmers consider them pests.

In 2006, Xie bought 40 pairs of young rats for 14,000 yuan (US$2,000). By 2007, he had bred over 1,000 rats when there were few rat breeders in his county. A female rat, or doe, could average 10 to 12 pups each year.

Liu Kejun told our reporter that in 2002, market demand was low. Since 2013, however, prices have soared to nearly 140 yuan (US$20) per kilogram. Before the Covid-19 pandemic, there was a huge market demand for bamboo rat meat.

Low in fat and cholesterol, bamboo rat meat is a delicacy in China's southern and southwestern regions. Were it not for the outbreak, Xie estimated that he would have seen sales of 4 million yuan (US$565,000) in 2020.

Xie grows a field of sugarcane for his rats. As rats seldom drink water, sugarcane and grass are also their main sources for hydration. "I planted sugarcane a month later than I did last year to wait and see if the policy would change," he told *ChinaReport*.

Since the outbreak, forestry bureau officials have visited Xie's farm several times to check if rats were being sold. Xie said he has 2,000 fully grown rats, but no buyers. Xie still goes to his farm every day, eager to pay back his loans taken out with a 5 percent interest rate.

"In rural areas, there are no other choices for farmers except tilling the land and breeding livestock," he said.

Poverty Relief

As part of poverty alleviation efforts, local governments in Guangxi offer financial incentives to rat breeders. Since 2007, Guangxi has provided subsidies to construct roads, renovate farms and purchase baby bamboo rats. In 2018, the local government provided impoverished families subsides up to 120 yuan (US$17) for each rat bred. In comparison, subsidies per chicken were 15 yuan (US$2).

Liu told our reporter that impoverished families make up 18 percent of rat breeders in Guangxi. Roughly 20,000 people in Guangxi have worked their way out of poverty through farming bamboo rats.

"The local government often says that better-off families should take more responsibility to help impoverished families," Xie said. Since 2015, Xie has helped more than 132 rat breeders get started by providing them with young bamboo rats and technical assistance.

Liu Kejun said breeding pays off relatively quickly. On average, he added, a 3-kilogram rat fetches between 150 yuan to 200 yuan (US$21-28) at a cost of around 50 yuan (US$7). In comparison, cows only bring 20-25 percent in returns on average.

Operations are also cheap and relatively easy to start up. Rats rarely become ill, which saves farmers from expensive vaccines or antibiotics. Many elderly residents and others with handicaps have taken up rat breeding to supplement their income, Liu said.

Xie Fujie's home is 70 kilometres from the county centre, an area dominated by grapefruit groves. Trees bear fruit three or four years after planting, after which they produce fruit annually. Rats, however, reproduce several times a year.

On March 22, officials from the Guangxi poverty alleviation office visited Xie's farm. "They came to check on how the local people are making a living since rats are not allowed to be sold, as well as the ban's impact on poverty alleviation efforts," he said.

Quarantine Concerns

There is a disinfection pool in front of Xie's rat farm where workers wash their shoes before entering. Since the Covid-19 outbreak began, Xie said he has been disinfecting his farm at least once a week. "But many small rat farms never disinfect and everything goes well," he said.

Liang Qiubo, head of Guilin Qiubo Bamboo Rat Company, said that raising rats is easier than raising poultry, pigs and sheep. "For example, poultry are susceptible to the bird flu, but bamboo rats are not prone to disease," he told *ChinaReport*.

China's MARA has already released poultry farming standards that include facilities, disinfection and vaccines. "There are no national standards for raising bamboo rats," said Xie, which he said is the biggest challenge for rat breeders. "Guangxi recently released local standards but they are not strictly implemented."

According to an article by Peking University's Shan Shui Conservation Centre, during quarantines of livestock, third-party institutions inspect feed, the environment, facilities, workers and veterinary drugs to determine whether they pose any health risks. But inspections of wild animals are a greater challenge because it is difficult to determine exactly what they have eaten.

China's Wildlife Protection Law divides wild animals into three categories: animals under State protection, animals under protection of local governments and animals with special economic, social or scientific significance. Bamboo rats belong to the last category. Before the ban on the consumption of wild animals on February 24, the Wildlife Protection Law had no prohibitive provisions on the consumption of bred bamboo rats.

According to Zhao Xiang, a professor with the Shan Shui Conservation Centre, there are two prerequisites for wild animals to be on the white list: There must be a complete system for quarantine in place to guarantee public safety, and farmed animals will not negatively affect their species living in the wild.

Ma Yong, deputy secretary-general of the China Biodiversity Conservation and Green Development Foundation, argued that security and breeding technologies are crucial for bamboo rats to be on the white list. He told *ChinaReport* that mass bamboo rat breeding has only been around for 30 years in China and there are few clinical studies on how it affects wild populations.

"From the perspective of public health, it is unlikely that quarantine standards on bamboo rats will be released soon," he said.

Liu Yongfu, head of the State Council Leading Group Office of Poverty Alleviation and Development, said at a news conference in March that government agencies are working to distinguish which animals are safe to breed. Farms that are breeding animals on the banned list, he argued, would be shut down and compensated to change businesses.

Xie told *ChinaReport* that if he were to take up pig farming, he would need at least 800,000 yuan (US$114,000) to start up his operation. "Coupled with the loans, I'd have to work for 16 years before I could turn a profit," he said. ★

Agriculture

Poultry Pays the Price

Hit hard by the coronavirus outbreak, China's poultry industry is still reeling from restrictions on shipping, a supply glut and lack of market confidence. What's worse, soaring prices are on the horizon

By Su Jiede

With no way to sell or feed them, Xie Hua buried 120,000 of his chickens alive.

In less than two months since Chinese New Year in late January, Xie, who leads a poultry production cooperative in Dangyang, Hubei Province, was forced to purge his stock of 330,000 chickens, selling off 210,000 for half the market price and culling the rest. Live burials of unwanted livestock were a last resort for many poultry farmers as sales channels were blocked.

The 10-year-old farmers' cooperative has lost more than 3 million yuan (US$423,000) in the wake of the Covid-19 outbreak.

"Many people in the poultry industry for over 30 years have told me they have experienced nothing like this. Chickens and chicks

Photo by Xinhua

A farmer in Zhuji, Zhejiang Province feeds his chickens, February 22

were buried alive nationwide," said Zhang Mingrui, manager of Beijing Huadu Yukou Poultry Company's business in South China. His company, built in the 1970s and one of the three largest hen breeders, lost over 70 million yuan (US$9.9m) in February alone.

China's poultry industry thrived in 2019 due to pork shortages caused by African swine fever (ASF). But with shipping paralysed nationwide and wet markets closed down during Covid-19, the industry took an unprecedented hit.

China Animal Agriculture Association (CAAA) estimated more than 14.98 billion yuan (US$2.1b) in losses between December 2019 and March 2020. In addition, experts predict that many poultry farmers will either be unable or hesitant to resume production in the wake of the outbreak, causing a shortage of supply and a price increase over the next two months.

Roadblocked

On January 23, a lorry from Zhang's company loaded with some 40,000 young birds bound for Xie's cooperative was stuck on a Henan Province highway. Wuhan, the capital of Hubei Province and epicentre of Covid-19, had announced a lockdown that day. Zhang said the birds are supposed to reach breeders within 24 hours of hatching, but authorities would not allow the delivery through to Xie in Dangyang.

Zhang was forced to turn around. He eventually sold the hatchlings at a huge loss, discounted from 5 yuan (US$0.7) to 0.05 yuan (US$0.007) each, which Zhang said "won't even cover the gas."

The increased roadblocks and lockdowns saw feed supplies cut and wholesale markets closed, straining the poultry industry chain. When the epidemic broke out, Xie's cooperative had 330,000 chickens. But with no hope in selling them, farmers buried 120,000 chickens alive. For the remaining 210,000 they reduced feeding from twice a day to once every three days – barely enough to keep the chickens alive.

Many farms even used hormones that force hens to moult early, during which they stop laying and eat much less, as a way to save feed and prevent them from producing eggs the farms couldn't sell.

Wang Xianzhong, technical director of breeding industry consultancy Jinong Pharmaceutical Group, estimated that in 2019 there were about 1.3 billion laying hens in China. Between 10 and 20 percent were given hormones to induce moulting.

The situation is more difficult for companies engaged in hatching and distribution. Duan Jun, general manager of Laide Ecological Agriculture Company in Wuhan, told *ChinaReport* that usually chicks were transported to breeders on the third day of the lunar new year. Since highways were closed this year, Duan culled 40,000 hatched chicks by burying them and disposing of fertilised eggs, a process that Duan said pained him deeply at first. But after 20 days of having to kill off his stock, Duan said he has numbed to it.

Despite these hard decisions, Duan kept the business running. He renegotiated with customers and promised to ship once authorities reopened the roads. Normally, Duan employed 40 farm workers on a 200,000-yuan (US$25,000) monthly payroll. But as most workers could not return to work, he was forced to hire costly seasonal labour at a minimum 300 yuan (US$45) a day. The farm eventually racked up 5 million yuan (US$705,000) in losses.

"In less than 20 days after the lunar new year, almost all chick suppliers in the country were killing their birds. They had no choice while all the roads were blocked," said Zhang.

Choked Chain

The epidemic hit a poultry industry that is increasingly interdependent and reliant on shipping, as local governments tightened restrictions on transportation lines, restricted breeders' licences or blocked roads. Since the industry is not centralised, with links from feed production to meat processing distributed across the country, transport is crucial to keeping the chain intact.

Covid-19 differs from previous avian flu outbreaks, where only specific sections of the chain were affected, explained Ma Chuang, vice general manager of Boya Hexun Agriculture Technology Company, an agriculture consultancy.

Eager to get feed to farmers in need, Xie appealed for permission to Dangyang government on January 25, but he was refused, despite having a licence from the destination city. Eventually, he got one shipment through, which he said barely helped.

The difficulties in transporting agricultural products sparked concern among authorities early on. Chinese ministries of agriculture, transport and public security issued a notice on January 30 that prohibited local authorities from setting up unapproved checkpoints and roadblocks to allow for shipment of fresh produce and agricultural supplies.

But this did little to solve the problem. In an open letter on February 1, the CAAA accused some local governments of taking epidemic control measures too far and stopped shipping altogether, preventing the sale of livestock and feed.

"There was no unified policy to address the problem. Only when local officials in charge pay attention, will it be solved," said Wu Zhimin, supervisor of the Hubei Poultry Association.

Hubei is the sixth-largest producer of poultry and eggs in China. In 2019 it sold some 530 million birds and had nearly 350 million in stock that required 3,000 tons of feed daily. Facing epidemic controls and transport restrictions, "most farms were running out of food," read a letter from Hubei Poultry Association seeking help from the CAAA on January 28.

Photo by CNS

Chicks at a poultry production cooperative in Congjiang County, Guizhou Province, March 6

The closure of wet markets only aggravated the situation. On February 1, Henan became the first province to close its wet markets, followed by other regions. "At that time, 27 provinces and cities closed their wet markets. For certain species of poultry, wet markets provide an important trade channel. The closure clogged it," said Gong Guifen, secretary general of the CAAA poultry branch.

Starting March 10, Zhang travelled south from eastern Shandong Province through Anhui, Zhejiang and Jiangxi provinces to survey the impact of the epidemic on poultry farming. He said the wet market closures had been devastating.

"Many farmers said they would stop buying chicks before April to cut their losses and hoped wet markets would open soon," said Zhang, adding that while some chicken farmers are adjusting to the changes, others are hesitant. Some are leaving the industry altogether.

The vulnerability of the live poultry market has been a long-standing problem for the industry. "Every time there is a major epidemic it affects poultry. Poultry markets are closed before the origin of the virus is located. This recklessness hurts chicken farmers," Gong said.

To protect chicken farmers from such outbreaks that happen every few years, Ma suggested that the industry establish standard protocols for every link to ensure product safety and protect farmers.

Market Woes

Gong told *ChinaReport* that the urgent problem is to stimulate consumption and sell overstocked product. However, restaurants, the country's main outlet for chicken consumption, have not resumed their normal business.

Ma said that growth in family consumption – the only area sustaining sales – would not offset losses from mass consumption, such as schools, companies and restaurants. What's worse, prices will surge after Covid-19 control measures are relaxed and demand spikes, Ma said.

Zhang Mingrui also predicted one or two months of soaring prices because of reduced supply.

"The reduction of chicks in February will lead to a reduction in meat supply. The Covid-19 pandemic might also result in a decrease in chicken imports. So I believe chicken prices will spike to a record high in April," Zhang said. Some experts have already observed chicken prices increasing since March.

The rises in chicken and pork prices will probably overlap. In 2019, African swine fever drove pork supplies down 21.3 percent compared to 2018, and production has not yet fully recovered. Market experts expected other meats to fill that gap in demand in 2020, such as poultry products.

To address these uncertainties, Gong suggested that authorities purchase overstock to mitigate farmers' losses like in Hubei, where the government bought eggs from farms and provided subsidies for transportation and electricity between February 18 and March 20.

After sustaining such huge losses, many farms do not have the capital to reboot production. On February 26, the People's Bank of China (PBoC) announced it would prioritise loans to livestock and poultry farmers.

Back on Duan Jun's chicken farm in Wuhan, the eggs are about to hatch. But he worries if the chicks will reach raisers. Owing payments for feed, back wages and vaccines, these deliveries are his last hope of surviving. "More problems will emerge after the outbreak recedes," said Duan, adding that feed producers are already pushing for payment.

Renewing confidence in the market will take time. Farmers from Xie Hua's cooperative are hanging their hopes on seeing profit later this year. But many remain hesitant. Some have not bought chicks for nearly two months, and the cost of their uncertainties will probably get passed on to consumers. ★

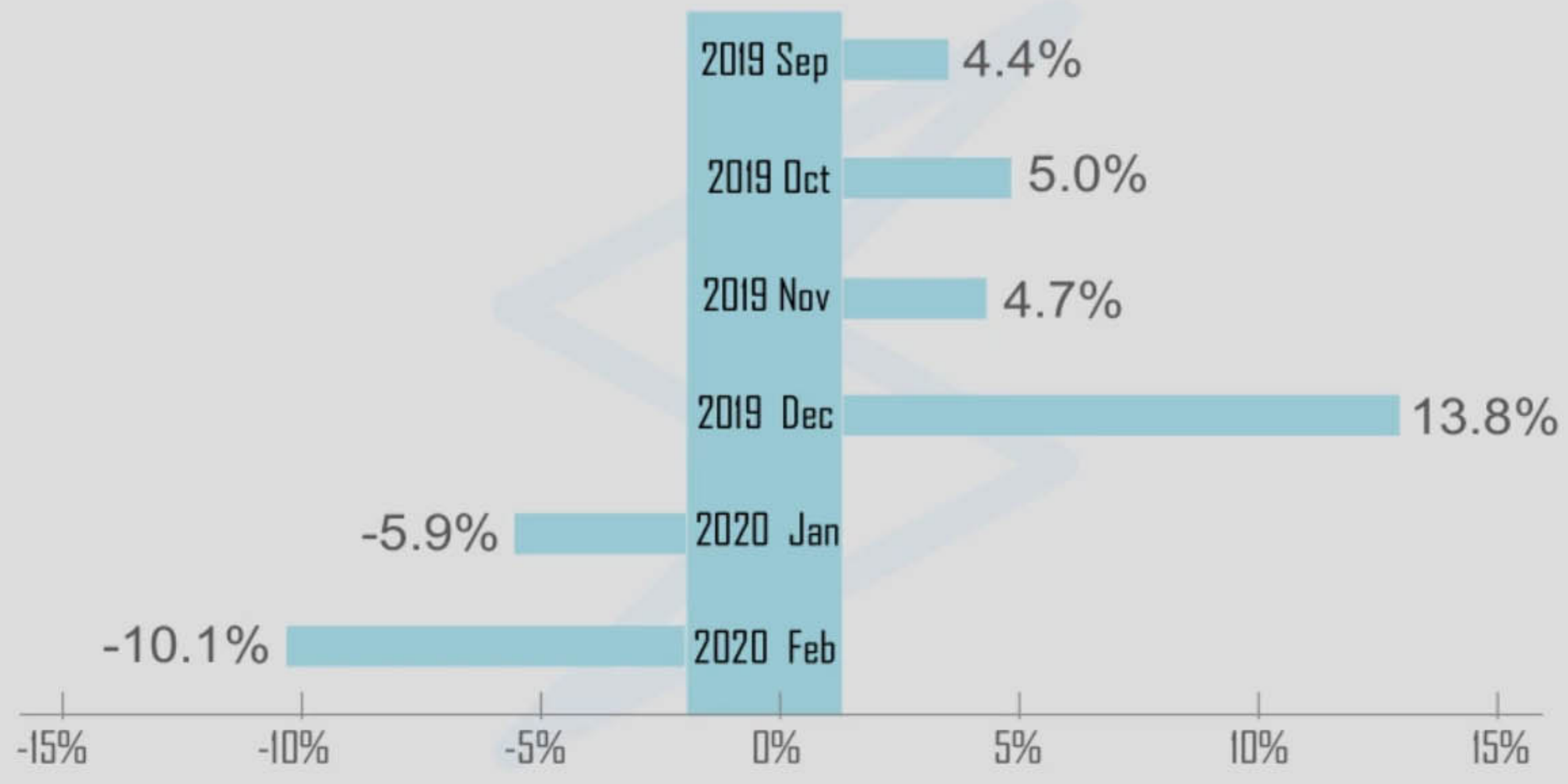
CHINA BYNUMBERS

-10.1%

Year-on-year decrease in electricity consumption in February, which totalled 439.8 billion kilowatt-hours

Source: National Energy Administration of China

Y-o-y electricity consumption (September 2019 - February 2020)



58,990

Number of applications China filed in 2019 via the World Intellectual Property Organisation's Patent Cooperation Treaty (PCT) System, making it the biggest user of the PCT System, a position that has been held by the US since the system was launched in 1978

Top five users of the PCT System in 2019

Source: World Intellectual Property Organisation (WIPO)

China	US	Japan	Germany	South Korea
58990	57840	52660	19353	19085

50%

Year-on-year growth in corporate credit bonds issued by private enterprises in the first quarter, which totaled 210 billion yuan (US$29.7b), while the net financing scale reached 93 billion yuan (US$13b), a near three-year high

Source: The People's Bank of China

11.59%

Year-on-year increase in the number of excavators sold in March, which totalled 49,408 and hit a record high

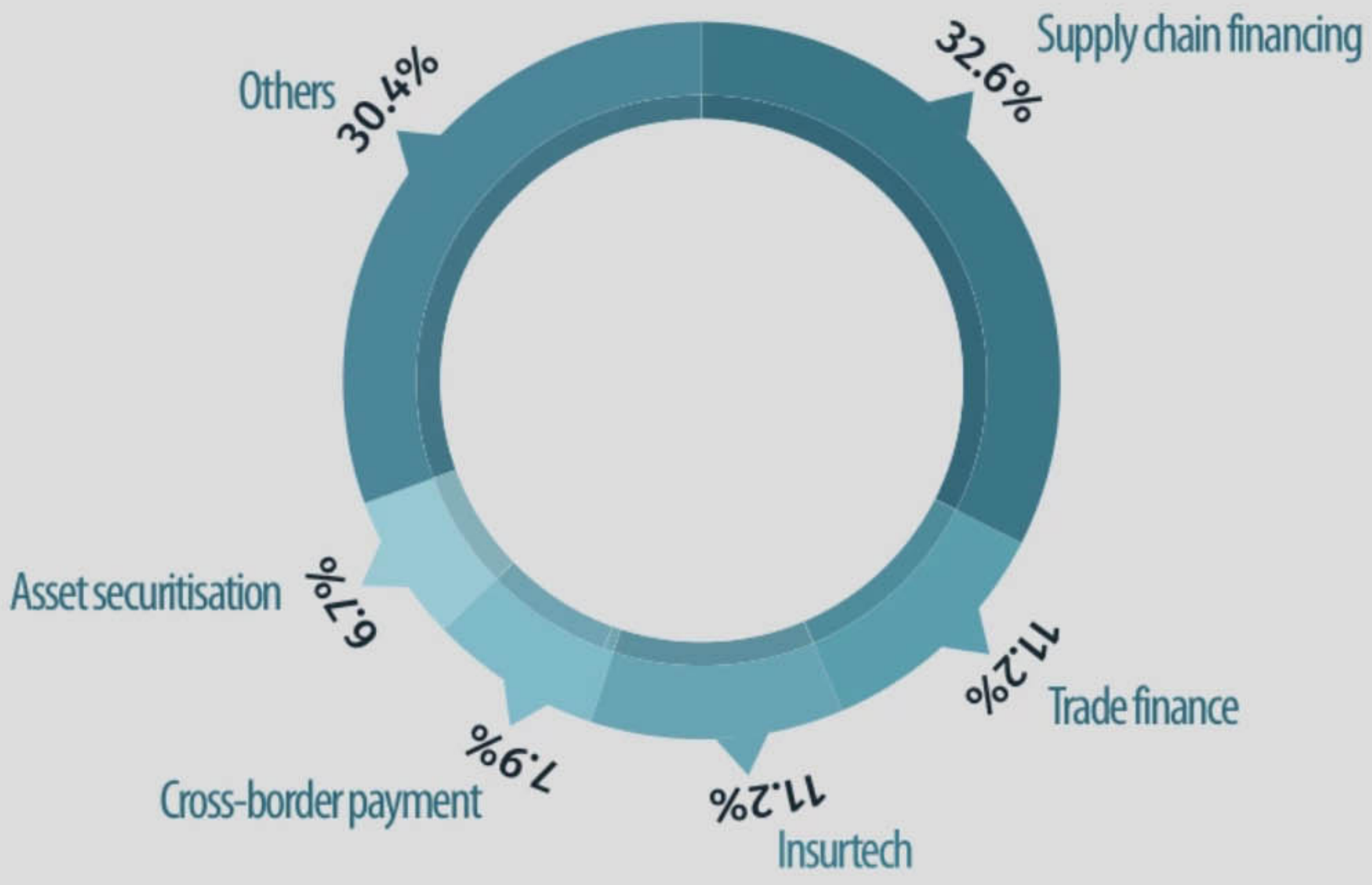
Source: China Construction Machinery Association

32.6%

Share of supply chain financing among all financial areas that use blockchain technology, as found in a survey of 112 financial sector blockchain projects in 47 organisations across China

Source: National Internet Finance Association of China

Share of the main financial services using blockchain among all surveyed organisations



Music

VIRAL TUNES

Zhang Gasong, a folk musician from Northwest China's Gansu Province, has released a collection of songs about life under the Covid-19 quarantine. When not stuck at home, the singer-songwriter travels his native land to record and preserve its rich folk tunes before they vanish with time

By Kui Yanzhang

Zhang Gasong

Courtesy of interviewees

The clip begins with a bearded Zhang Gasong in rounded sunglasses plucking the *sanxian* – a three-stringed Chinese lute – with what appears to be a bank card.

Zhang, 31, sings in the gravely vocal style of China's northwestern folk tunes, his black medical mask lowered to his chin:

"If I had known I would stay home for so long / I wouldn't have only bought two packs of Red Lanzhou cigarettes. / If I had known they would shut the village for so long / I would have stolen more time with my love. / If I had known I'd be staying home for so long / I wouldn't give my only mahjong set to my friend / If I had known the village would be locked down for so long / I would have filled up my belly with alcohol…"

Near the end of the video, an elderly woman appears in the background. Zhang turns back and asks her, "Isn't that a good song, grandma?"

Zhang's clip went viral in early February, getting over 40,000 reposts on Sina Weibo in a few days and millions of views on short-video platform TikTok.

The song, "I've Been At Home for So Long," about life in a northwest Chinese village under quarantine, came as a surprise hit for Zhang, a singer-songwriter of note in China's folk scene. He was the subject of the award-nominated documentary *Stammering Ballad* (2018).

Years ago, Zhang left his hometown seeking fame as a musician, visiting hundreds of cities as what he calls a "travelling minstrel." But Zhang said he's been slowly returning to his roots. His songs, full of humour and power, all grow from the soil and dust of the hometown he had once left behind.

"Everyone has a natural emotional bond with the folk music of the land where they were born and lived," Zhang told *ChinaReport*. "Some people might find folk music not fancy enough. But folk music is real history. It's the ancestor of music."

Cure for Quarantine Blues

On January 17, after collecting folk songs in Tianshui and Dingxi, Gansu Province, Zhang returned home, a village in Jingyuan County, Gansu Province to celebrate the coming Spring Festival.

The singer rode his red three-wheeler to the market for some pre-holiday shopping. He bought a bundle of matches, two packs of Red Lanzhou cigarettes and a plastic jug of liquor. Zhang was expecting a classic family gathering.

Then Covid-19 happened. The village was locked down and villagers were told to stay in their homes. By February 1, Zhang's family had run out of fresh food and were living off the leftovers from their Spring Festival feast. To cheer everyone up, Zhang made up the song on the spot.

The next day, Zhang recorded "I've Been At Home For So Long" in his backyard. He had his first internet hit.

But instead of spending a lot of time online, Zhang said he concentrates more on the little things in life, preferring to chat with family while appreciating the moon, barbecuing in his yard and playing cards with his uncles.

"As long as you don't check the news on your phone, you find that being quarantined in a village is not that bad," Zhang told *ChinaReport*.

Zhang wrote nine more songs about life under quarantine. In songs like "Farmers' Rock to Fight the Outbreak," Zhang ridicules the unreasonable methods some local authorities have adopted to fight the pandemic:

"Red badges on their sleeves, they act like savage beasts / they smash up mahjong tables and smack around families."

He wrote "Slogans of Epidemic Prevention" about the tongue-in-cheek public awareness messages splashed on the walls in his village:

"If you're bored today and go stroll around / tomorrow Covid will put you in the ground", "Go ahead and try not wearing a mask / try and try until you die", "For a lifetime of fun stay home for two weeks / go out and get your legs broken, answer back and lose your teeth."

He also wrote "Admonition" about Li Wenliang, the ophthalmologist at Wuhan Central Hospital who was among the first whistleblowers warning of a possible SARS-like outbreak, later acknowledged as Covid-19. Police investigated Li and forced him to sign a letter of admonition promising "not to make false comments on the internet." Li died from Covid-19 on February 7. He was 33.

Last year, Zhang signed to Beijing-based label Thirteenth Month.

Label founder Lu Zhongqiang told *ChinaReport* that his work reminded him of classic folk songs about the loss and longing of ordinary people, such as Zhou Yunpeng's "Chinese Children" and Chuan Zi's "In Happiness," "Zhang Qianhua" and "I Wanna Marry."

"His songs carry both humanity and realistic criticism. I think musicians have a responsibility to record social changes, phenomena and incidents," Lu said.

The Village Alien

Zhang said that he is not thinking about messages when writing his songs. Most are improvised and spontaneous – a strong feature of the folk music traditions in northwest China.

Anything in life can spark a song in Zhang. For the past decade, he has been collecting the happenings and sounds in his hometown with a digital camera and audio recorder. Some of them he samples in his songs, such as the soft rustle of wheat, farmers ploughing their fields and even villagers' snorts and coughs.

Zhang was born in a poor, remote village in Gansu Province, but grew up with its rich musical traditions. Each year, the village holds a temple fair where locals showcase their talents. His father would perform *Qinqiang*, a folk opera form from northwest China, while his uncle played traditional instruments such as the *sanxian*, *banhu* (a bowed string instrument) and *qinqin* (a two-stringed instrument).

Zhang grew up writing songs. He and his siblings wrote "Blackout" about how kids would have fun in the dark during the village's frequent power outages. They also wrote a song for their donkey.

The village began changing around 2000. More villagers were leaving for the cities to find jobs, Zhang said, and often would come back with new and interesting things. Some would return with motorcycles. Others had beepers clipped to their belts.

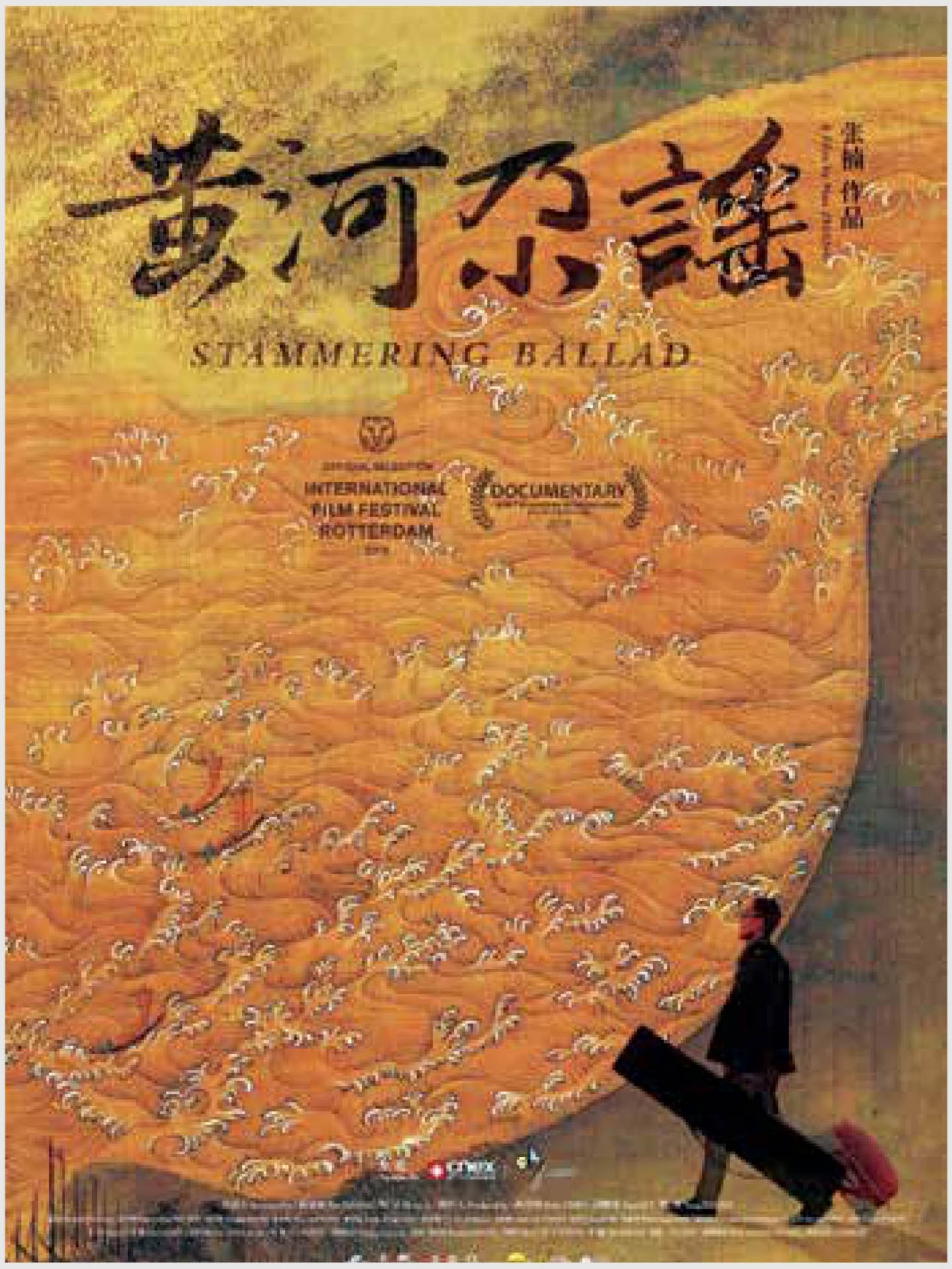
It was a new classmate, the son of a contractor in the nearby city of Baiyin, that really opened his mind to new ideas. Zhang remembers he was different than other local boys. He wore fancy glasses and had a different air about him. The village boys called him "the alien."

Zhang's unusual friend had a Walkman and liked rock music, which at the time in China was still underground. He introduced Zhang to rock musician He Yong's "Pretty Girl." "When I heard the song, a loud voice popped in my mind, crying 'I wanna do that!'" Zhang said.

Zhang often sat for hours looking towards Baiyin, imagining the street lights and all the interesting things happening there.

That year, he took a summer job at a construction site in Baiyin to save for a guitar. But since nobody in his village could teach him how to play, he played it like a *sanxian* – which uses a large plectrum and distinct fingerings.

By high school, Zhang's musical tastes had turned to Chinese rock and indie. He devoured albums by folk artists Zhou Yunpeng and Wan Xiaoli, and the northeastern rock of Second Hand Rose. He seldom listened to folk songs. "For a long time, I'd forgotten the tunes of my hometown," Zhang told *ChinaReport*.



Poster for the documentary *Stammering Ballad*

In 2008, Zhang enrolled in the Central South University of Forestry and Technology in Changsha, Hunan Province. But he spent more time playing music than studying. He and four other students formed a rock band called The Hunter and sang about what he calls "typical cliched sentiments of youth."

In his junior year, The Hunter was rehearsing at a local bar when Zhang started humming a northwestern tune from his childhood. "I realised everyone was staring at me when I looked up. There was a glimmer of amazement in their eyes. At the time I realised that the music I was familiar with the most since I was young had the incredible power to impress listeners," Zhang said.

Have Folk, Will Travel

In 2011, Zhang took his show on the road, booking any show he could get at venues and bars in different cities and provinces. He describes himself as a "wandering minstrel." He would sleep wherever he performed, from bars to underground pedestrian tunnels.

Zhang's touring schedule picked up quickly. The following year, he dropped out of college. In 2013 alone, he performed 103 shows across the country.

He gave up writing sentimental songs and turned to themes of rural life. Many are inspired by real stories from his village. "Old Zhang" is based on the wealthiest man in his hometown. He has nine daughters and was the first in the village to travel to the provincial capital of Lanzhou and taste a bowl of its namesake noodles.

Zhang would spend months at a time collecting folk songs for the villages of China's northwest. He has met with more than 100 folk artists, collecting 1,000 songs in nearly 30 music styles.

He has a particular interest in veteran folk musicians. "When you hear them singing, it's like reading a history book. They are all skilled in their arts, and, from my perspective, are much wiser than monks in temples," Zhang told Shanghai news portal *The Paper*. "They'll say something just casually, and it will leave a deep impression on me."

Over the years, Zhang has developed his own style that he calls "ga folk." He says it comes from the soil and everyday life, rewriting the old tunes in an innovative modern way. He has released five albums: *The Smell of Soil* (2014), *The Mountain Village* (2014), *A Happy Life* (2016), *Ga Folk* (2017) and *Stammering Ballad* (2018).

Zhang married in 2015 and settled in Dali, Yunnan Province, an area that over the years has become a vortex for creative people from all over the world. He divides his time between Dali, collecting folk songs in the northwest provinces and on tour.

In 2018, director Zhang Nan filmed a documentary about Zhang. The film *Stammering Ballad* was nominated for the Network for the Promotion of Asian Cinema (NETPAC) Award at the 47th International Film Festival Rotterdam.

"He has a very assertive and positive attitude about his rural experience, and he tours his rock and folk in different cities, which is a modern approach. The contrast in him is interesting," Zhang Nan told *ChinaReport*.

Lu Zhongqiang said he signed Zhang to his label after watching him perform a two-hour show at a Beijing bar last October.

Lu said Zhang's biggest advantage over other folk artists is his lack of ceremony. "No matter the occasion,... he'll naturally improvise a song and sing it out loud. The music just naturally flows out from him," Lu told *ChinaReport*.★

Zigong

Stegosaurs, Salt and Spice

Home to lanterns and fossils, the Sichuan city of Zigong gets a roar of approval for its unusual sites and spicy cuisine

By Tautvile Daugelaite

The curved eaves of the black roofs at Zigong Salt Industry Museum are reaching for the sky

How does one end up in Zigong? I am not entirely sure, to be honest, but I feel quite lucky I did. It takes at least one missed train – and those are way too easy to miss in China, given all the safety and bureaucratic corridors you have to navigate between entering the train station and sitting down in your seat – followed by scrolling through many sold-out trains on your phone while seated outside of the pleasantly warm Kunming railway station. After all, missed trains can bring surprisingly creative solutions for a trip.

While Dali, the dreamy mountain city in Yunnan, was my original destination, it seems like it was so for many other travellers, since efforts to find same-day tickets were fruitless. Since I didn't want to waste a day of my trip in southern China, I turned to Baidu maps and a thick Lonely Planet guidebook to inspect where had railway connections to Kunming, and Zigong, in the neighbouring province of Sichuan to the north of Yunnan, was one of the ones that had a good half-chapter dedicated to it. Plus a couple of available tickets for the train leaving in half an hour, which was of the utmost importance.

Zigong, as one might expect of Sichuan, gets scorching hot and humid in summer. To the extent that it might cloud your judgement and lead to extreme sweating and dizziness when eating Sichuanese food.

Travelling around China might leave you feeling like you know what to expect in a new town – a Drum Tower, old town street with local nibbles, a temple, and probably a central square with sculptures and some square dancing when the weather allows. Zigong is a rebel town in this equation and while you could unearth a temple, it is certainly not at the top of the list of attractions.

Dinosaur Museum

The dinosaur museum is simply the calling card of Zigong. While admittedly not for everyone, when it claims to be "one of a kind"– you just have to go. Zigong Dinosaur Museum was the first such establishment in China and is built upon an excavation site that has one of the largest dinosaur fossil concentrations in the world. Some parts of the site have been left uncovered so you can see the exhibits where they were originally discovered. Zigong shows an example of shaping the city's message around unique and even slightly quirky concepts. Where else would you be able to visit a dinosaur museum that is shaped like an actual stegosaurus?

The visit can take up anywhere between a few hours and the majority of the day, depending on how interested in paleontology you are. Highlights include the most complete skull of a carnivorous dinosaur in the world and the most complete stegosaurus skeleton ever discovered on display, which is likely to impress even those who have no clue about paleontology. And if not, the outdoor area with towering mechanic dinosaurs or 3D movie screenings will make for a decent giggle. Just stroll around and play out your version of *Jurassic Park*. Just do not leave out the snacks which will come in handy while

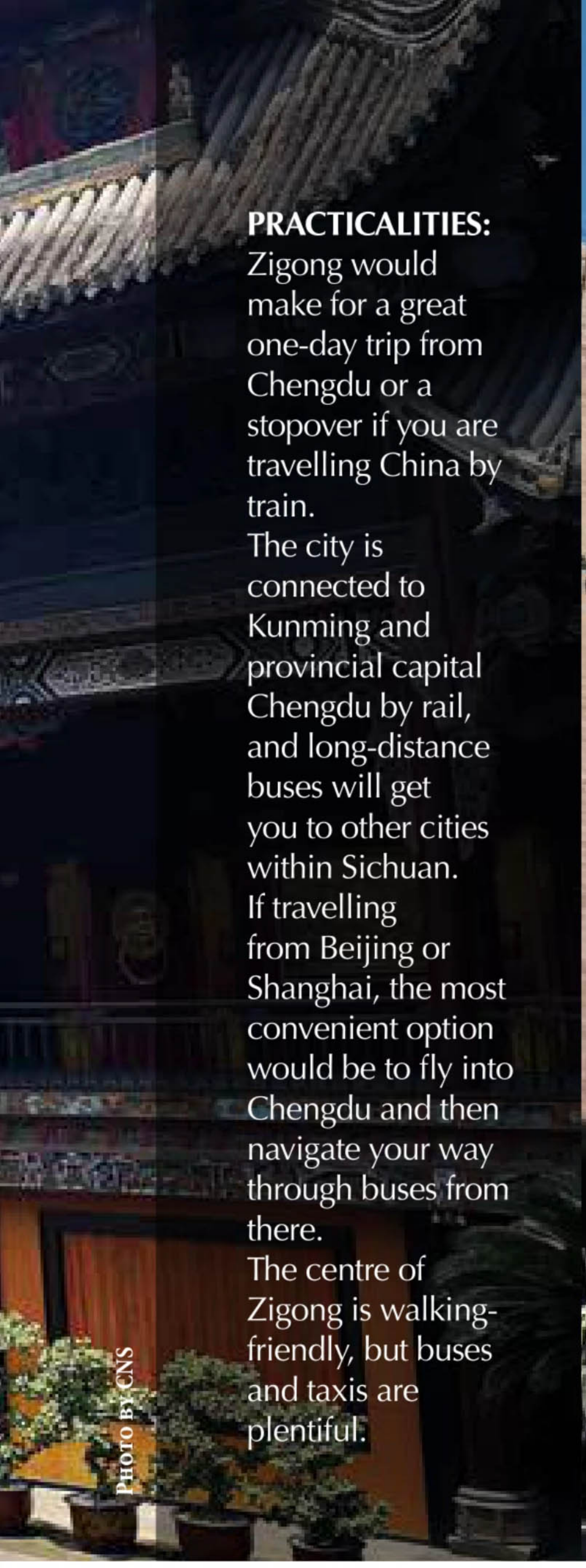
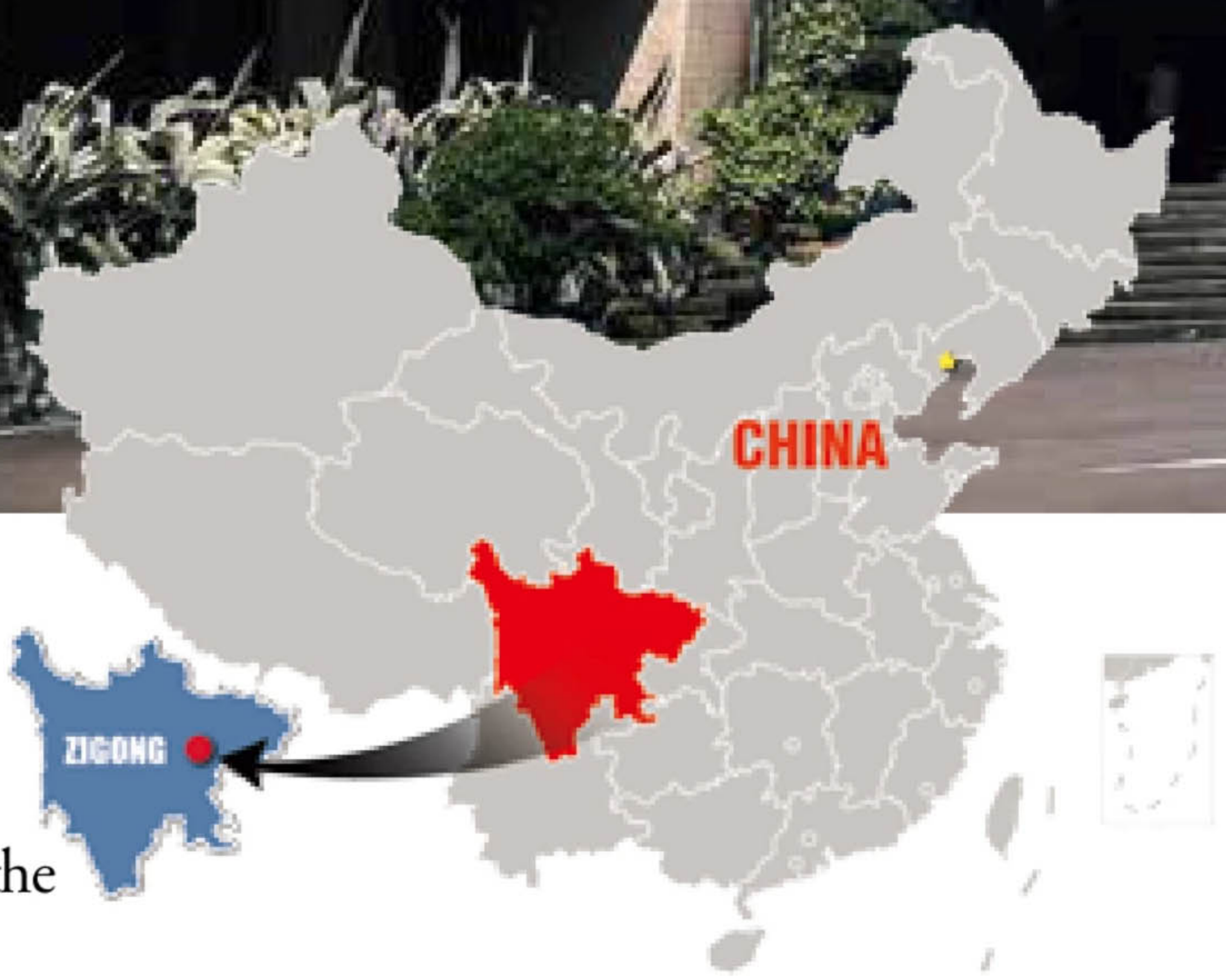


Photo by CNS

PRACTICALITIES:
Zigong would make for a great one-day trip from Chengdu or a stopover if you are travelling China by train.
The city is connected to Kunming and provincial capital Chengdu by rail, and long-distance buses will get you to other cities within Sichuan.
If travelling from Beijing or Shanghai, the most convenient option would be to fly into Chengdu and then navigate your way through buses from there.
The centre of Zigong is walking-friendly, but buses and taxis are plentiful.

Courtesy of Tautvile Daugelaite

Zigong Dinosaur Museum is a protected UNESCO site



relaxing on one of the outside benches in the shade of a T-Rex.

After the dinosaur museum, the second point of interest is a salt museum. While it may not sound like an afternoon-well-spent, Zigong Salt Industry Museum is housed in a 280-year-old guildhall for salt merchants that will leave one in awe. The black roofs with arching eaves and dark colours that dominate the interior mixed with the lush greenery of the courtyard maze make the site a fantastic architectural monument even if you choose to miss almost every single salt-related exhibit.

The salt industry in Zigong dates as far back as 25CE during the Han Dynasty and satisfied the needs of salt for the whole of Sichuan Province.

With the first two most popular attractions in Zigong being as unusual as they are, I had to add a third one to the mix. While this certainly hints closer to the traditional Chinese culture, it is yet another unique spot in the country.

Zigong is where the Lantern Festival originated. Nowadays you can also visit lantern festivals and exhibitions in Beijing, Hong Kong, Shanghai, and other cities in January or February each year.

Naturally, Zigong had to commemorate this local festival with the presence of Zigong Coloured Lantern Park. The park is at its most active during the Lantern Festival – as well as more expensive to visit – but is open all year round. Colourful lanterns depicting anything from monkeys to palaces and phoenixes can be seen on display depending on the year and season. It goes without saying, definitely save the visit to the lantern park for after sunset. Lantern Park is again one of the must-see spots in China, even if it does not feel like your cup of tea. After all, the rest of the lantern parks you get to see later can only try and keep up with the original.

Spice Trail

Locals claim that Zigong's food is unique even for Sichuan and is crowned the spiciest in the whole province. I would argue with that after indulging in a good Chongqing hotpot, but let me just say that scorching heat paired with Zigong street snacks certainly brings the heat on, so it is best paired with a cold local soda.

One of my favourites is Langya potatoes, popular all around the streets of Sichuan but is named for a district in a city in Anhui province. Go figure. It is just like the spicy version of curly fries, without the crispiness. The potatoes are lightly stir-fried and then tossed with spring onion, spicy Sichuan chilli oil, and sesame. A real treat for carb lovers!

Other Zigong specialities include dumplings, that are also served in the bed of fiery red oil, or fish dishes. To calm the fire in your mouth after all the chilli oil, get a plate of Zigong pickled vegetables, just beware of the pickled chilli. And the heat did not stop me from slurping as many bowls of the local spicy noodles as I could. ★

Isolated, Yet Connected

By Adam Robbins

Probably like you, I've been a somewhat-willing prisoner these last months, as much from fear and a sense of powerlessness as from those faceless guards armed with fever-check guns.

But spring has poked its hopeful rays into our South China hearts, and our (briefly) low-risk city of Shenzhen showed me moments of real connection amid the pandemic panic.

Sunday mornings see a new ritual unfold, as book club members Zoom in to discuss the week's plague-related title. (Camus took pride of place, of course.) They're all back in the US, sharing the shock of finding empty market shelves, but I'm fixated on their cocktails and wine. But, no, coffee must suffice. It's only 9am and day-drinking is a perilous, stumbling road.

So we finish and I decamp to the wide world (masked and gloved, of course – one neighbour calling the cops to report me is one too many). The tai chi group is back, clacking their fans and gliding in loose linen while blaring "Once Upon a Time in China." Kids scoot by, grannies perambulate infants – all in masks, now so strangely normal. But so far none of the aunties have appeared for their evening dance party. Good. Count me among those giving the side eye to that noise pollution.

Beyond the central gate, the river invites me and hundreds of neighbours out for a stroll. Kids with plastic fishing nets duck beneath plastic tape marking the riverwalk off limits. At this point, any fish they catch, chock full of factory runoff, would be more dangerous than congregating along the waterline. It's almost comforting to face an old, familiar threat to our health…

In the long strip of park above the river shore, another neighbour practises extreme social distancing, cracking the long chain of his whip in volleys of thunder. The noise, the flying metal, and the stern concentration of his middle age brow all brook no approach.

As I walked along there, in the beginning of the crisis, the metal barrier announcing the riverwalk's closure had sent a ripple of loss from my heart to my toes. In this small Shenzhen suburb, there's so little for me to enjoy. Not yet confident enough to hop the barrier and risk a tongue-lashing (or worse), I sat there, a little crestfallen.

The tai chi group is back, clacking their fans and gliding in loose linen while blaring "Once Upon a Time in China." Kids scoot by, grannies perambulate infants – all in masks, now so strangely normal. But so far none of the aunties have appeared for their evening dance party. Good.

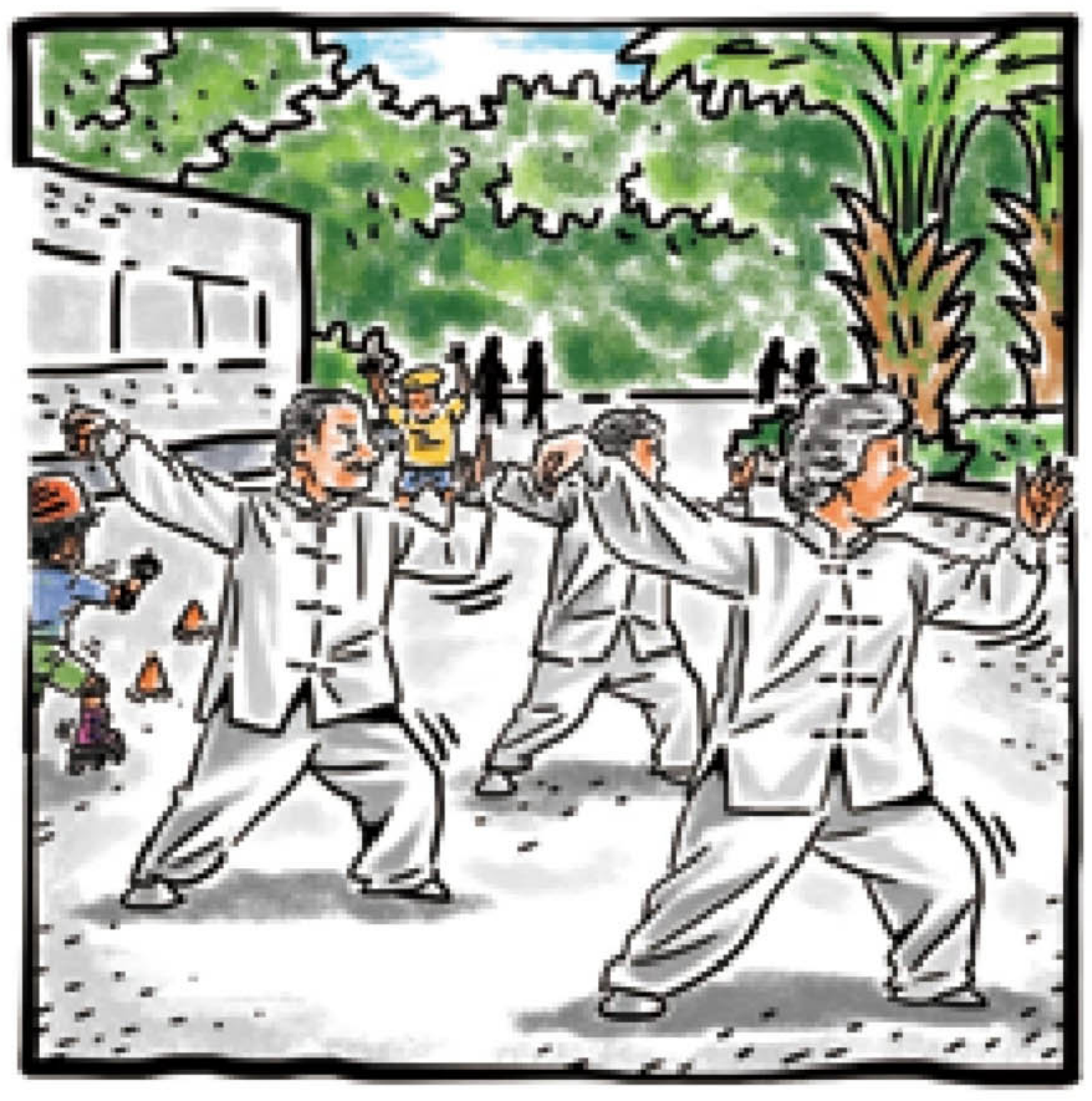


Illustration by Xiao Zhenduo

"I like your hat!" It was a stranger from the neighbourhood, taking his own stroll in that strip of parkland. It was just a tiny gesture – in English, no less – but it bolstered my heart enormously. He was right, mine is a great little maroon newsboy cap, and I thanked him, mentioning where I'd purchased it. Then we each went on our way, my mood leavened like the sourdough starter on our kitchen counter.

From that kitchen, I've concocted cookies and cupcakes, the miniest of cheesecakes, brownies, lemon bars, and more. With far more butter and sugar on our hands than one couple could handle, I've begun venturing out with foil-wrapped reserves for our semi-quarantined friends. One batch I mailed never made it (I suspect the guards intervened in an abundance of caution… or gluttony), so we walk the care packages over now.

Usually it's not a problem, except our chronically tardy friend wasn't there to receive the bundle. Maybe we could leave it at the security station? Faster than you can say "Napoleon complex," one of the guards was chasing off my inquiring husband, ignoring his excellent Chinese and practically barking for us to be gone. He only stood down when a passing resident overheard and explained that we just wanted to drop it off. Permission, finally, was granted… though a final intervention was needed to prevent a distasteful dosing of alcohol spray.

Our friend did get the cookies. She reported them delicious.

Home again, an email arrived from our friend back in America. She'd spent two years in Beijing while we were there and now she's wrapped up a stint in rehab. I'd learned she was in the programme back in February and I'd gone online to arrange for photo postcards to arrive, one a day for a couple weeks. And they were signed by our cat, since all her best friends are cats.

They were photos of strange, melting statues, murals of monkeys and wide-eyed self-caricatures, ending with a shot from our trip to Hong Kong's Golden Buddha, where she had pet the docile cows that own the place. "It made me incredibly happy," she reported. "I think I showed everyone at the programme." I slept well that night.

From in and around our apartment-prison, little tokens of comfort can pierce the gloom. It's no cure-all for all that ails the world, but it's enough to calm a fevered brow and let us get on with the work of living. ★

Exercising Restraint

By Joshua Dummer

As we all know, everything is off-kilter due to the coronavirus pandemic. Depending on where you live, this could have lasted for nearly 100 days already. No matter where you live, it won't be getting back to normal any time soon. In some ways, maybe not ever.

So as many of our old routines have been shattered, with no obvious end date in sight, we're all having to find ways to live in this new reality. For many people, it means figuring out how to survive when your income evaporates. For workers deemed essential it means facing dangerous situations on a daily basis. For frontline healthcare workers, it means confronting the human cost of the pandemic face-to-face.

As a childless adult that works on a laptop, it has mostly meant sitting in my Beijing flat, compulsively refreshing social media and simply trying to fill time. Frankly, as an increasingly boring married person, this isn't too different from my normal life, except with the knob marked "dread" turned up all the way and the knob marked "options" turned way down.

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Over the last couple of years, a key pit for me to throw my time into has been that mainstay of boring people – the gym. It gives me a reason to wake up early, to ensure I'm asleep by a certain time, to pick healthier meal options that facilitate muscular recovery rather than subsisting solely on my preferred diet of beer and nuts. Basically all of the things that working from home under lockdown seems to make largely meaningless. Why do we need to wake up early if we're not going anywhere? Why should we worry about how our jeans fit if we're wearing pajamas?

Of course, gyms were among the first businesses to be shut down, as indeed they should. The average gym is a petri dish of unwashed hands, spittle expelled through performative grunting and stale sweat at the best of times. The water runs brown when I wash my hands after a session at my Beijing commercial gym, which is apathetically wiped on a daily basis by a single extremely tired geriatric.

In the early days of Beijing's lockdown, I eschewed exercise entirely. Frankly, I treated it as something of a break from self-discipline. It seems many of us have been feeling an apocalyptic version of the urge that sees people at British airports drinking a few pints and eating vast greasy breakfasts before catching their 8am flight to Spain. I'm not alone in this, according to a report from Forbes last week that shows Americans are consuming more alcohol, junk food and Netflix than ever before amid their Covid-19 epidemic.

Illustration by Xiao Zhenduo

But after close to a month of daytime drinking and a level of cheese consumption I now recognise to be self-destructive, I realised I should probably start to move again somehow. Particularly after I felt my head nearly explode after carrying a backpack full of cans of Tsingtao and bags of those nice chilli and Sichuan-peppercorn peanuts up a few flights of stairs.

Naturally, my inner-city flat doesn't have space for a barbell or a rack, and I doubt slamming a weight on the laminate wood flooring would make me popular with either my landlord or my elderly neighbours, who seem increasingly suspicious of me anyway amid news of imported cases from abroad.

My first choice was jogging. I thought that it would have the dual benefit of getting me out in the fresh air and allowing me the pleasure of quick progression. That was true for two weeks, but it turns out that jogging doesn't work well with the gung-ho, psych-your-self-up-with-heavy-metal-and-go-for-it approach of lifting heavy barbells and I quit, demoralised after some part of my lower leg wouldn't stop complaining about the hard work of moving my feet.

Next was something a bit closer to my comfort zone, doing various exercises on apparatus in my local park, which allowed me the nice part of jogging (being outside) with the unpleasant part (the jogging).

That was a much better fit. Perhaps too good in fact. In no time at all, seizing on the chance to do something that felt productive, even egocentrically, I began working out twice a day, doing hundreds of pull-ups, thousands of squats, countless dips a week. While this has helped roll back the influence of cheese on my silhouette, a third consecutive morning of waking up after 10 hours of sleep but feeling more tired than when I went to bed forced me to admit that I was perhaps overdoing it and needed to allow the pendulum swing back in the other direction.

So, I've also eased into a routine somewhere between exercising until your joints explode and eating peanut butter out of the jar at 5am, much as February's high pitch of anxiety here in the Chinese capital has softened into Beijing's new routine of constant QR-code scanning and limited horizons.

While it's not ideal, it could be much worse. Which, it seems, is the best that could be hoped for now.★

Chinese Desserts Never Come Last

By Mina Yan

You know what outdated but still kind of sexy pickup line doesn't work on dates in China? "What would you like for dessert? / Baby, I am dessert." It's not that Chinese people aren't spontaneous or romantic. It's just that dessert culture in China is different than what we're used to in the West.

Think of any authentic Chinese restaurant in the US. What do you get after the meal is over? A fruit platter. No waiter is going to bring you a small menu and ask if you've saved room for dessert. It's just not the way Chinese people eat sweets.

One of the most common Chinese dessert items familiar to Western palettes is the egg tart. They are a must-order for dim sum. The subtle sweetness mixed with the fresh flaky crust make egg tarts impossible not to fall in love with. But while in the West we'll automatically categorise egg tarts as an after-meal dessert, Chinese diners will eat it right alongside the savoury and spicy dishes they've ordered.

But does that mean Chinese people don't eat dessert? Definitely not! Dessert plays such a big part in Chinese culinary culture that there are shops all over the country dedicated to it. Influenced by the dessert culture of Hong Kong, these shops specialise in Asian style desserts with a few options for teas, coffee and cocktails for a fancy high tea fix any time of day.

And while European desserts are now extremely common in China with cake and pastry shops available in most shopping centres, traditional Chinese desserts tend to contain sweet black sesame, red bean and custard, and they tend to have a lot less sugar than the sweet, sugary delights that Western taste buds expect.

With summer around the corner, warm and sunny days call for nothing more than the most iconic of Chinese desserts. Originating from Taipei, shaved ice is a classic summer treat. Unlike Hawaiian shaved ice served in a cone with syrup drizzled on top, shaved ice in China is a sit-down dessert filled with different kinds of beans, fruits and jellies, and usually topped off with a swirl of condensed milk for a dash of sweetness.

So when it comes to eating in China, restaurants are for savory and spicy meals. Anything dessert-like on a dim sum menu will be served along with your stir-fry and pork buns. But, if you're looking for a real local dessert, venture into one of the many dessert cafes that specialise in classic local treats. ★

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real chinese

gē jiǔ cài

割 韭 菜

ge jiucai

Reap from, exploit

China's stock markets remain volatile as the sweeping Covid-19 epidemic affects the domestic and world economies. Wary of the situation, small day traders are using a new slang phrase to warn each other to watch out for large investors and market manipulation: "*ge jiucai*."

Originally meaning "to harvest chives," *ge jiucai* means to profit easily off of someone. Because chives are a hearty crop that grows back quickly after reaping and can be harvested many times a year, the phrase refers to inexperienced traders whose ignorance of the markets makes them easy to repeatedly exploit.

The term first came into use among stockbrokers to describe how individual investors are easily manipulated by more experienced traders. For example, many follow the herd and panic-sell when big investors want to bring down prices. They mock small investors as "chives" since they never learn and allow larger investors to repeatedly exploit them.

The term is now used in many fields. For example, you can say real estate developers *ge jiucai* when they hype up the housing market. The word is also frequently used to criticise local governments for collecting heavy taxes from the public. ★

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